U.S. Department
of Transportation

Expanding the Use of Private Sector Providers in Rural, Small Urban and Suburban Areas

October 1987

UMTA Technical Assistance Program

The cover photo shows students boarding one of the buses of the Lawrence Bus Company, serving the University of Kansas and Lawrence, Kansas. This photo is provided courtesy of Chris Ogle of the Lawrence Bus Company. The help of Pat Weaver with the University of Kansas Transportation Center is also gratefully acknowledged.

Expanding the Use of Private Sector Providers in Rural, Small Urban and Suburban Areas

Final Report
October 1987

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PREFACE

The eight case studies herein are intended to document examples of rural, small urban and suburban transit and paratransit systems that have been successful in: 1) utilizing private transportation companies; 2) reducing government intervention; and 3) reducing or minimizing their reliance on UMTA funding. Cases that are diverse in terms of location, operating environment, operating methods and funding strategies were intentionally selected in order to provide examples potentially useful and relevant throughout the nation.

The cases were selected by contacting all 50 State DOT's, the American Bus Association, the International Taxicab Association, and the United Bus Owners of America. Although numerous other successful cases were identified in many states, budgetary and time limits required that only eight cases be selected that met all three study criteria noted above.

Phone interviews and preliminary data collection by mail were completed first. Thereafter site visits were made to gain a first-hand understanding and assessment of the system's operation and its success. In addition to government and private sector persons responsible for the system's management and operation, the Consultant also interviewed other local officials, agency representatives, interest groups, consumers and State officials as part of the on-site assessments.

For each case report the reader is first given a description of the system, its history and environment. Secondly, operating data and financial statistics are analyzed to show evidence of cost and service efficiency differences between the private-operated service and public-operated service. Where possible, before and after comparisons are given. In other cases, time-series comparisons are given depending upon the type of data available. Third, is an assessment of the system's overall impact and its current status in its local setting. Finally, a discussion of the transferrability of the model and a summary of what the critical factors of success were found to be are given. An overall summary of findings and conclusions regarding the potential application of these cases generically and ideas and guidance they suggest for public policy is included in a separate chapter at the end.

The authors wish to thank the numerous State and local officials who gave freely of their time to assist with this project of whom there are too many to provide a complete list here. Following is a list of one local person from each case study who served as the Consultant's chief local contact and helped coordinate meetings with other individuals and provided access to the data and information needed to complete the study.

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Ms. Juanita Barrett
Kern Rural Transit System
Bakersfield, California

Mr. Larry Barnes
Sampson County Department of Social Services
Clinton, North Carolina

EXECUTIVE SUMMARY

Eight case studies of rural, small urban and suburban transportation systems were examined to assess their success in: 1) Using private transportation companies; 2) Minimizing or reducing government intervention; and 3) Operating with marginal or no UMTA funding.

Three of the case studies, including: Cape May County, New Jersey; Chicago Transit Authority Specialized Service; and Sampson County, North Carolina Department of Social Services have recently transferred part or all of their service operations to the private sector. The other five, including: Canon City, Colorado; Chester County, Pennsylvania; Hawaii County, Hawaii; Kern County, California; and Lawrence, Kansas, have all involved some utilization of private sector operators since the beginning of their systems.

Success in utilizing private transportation companies was defined to mean that both the local government transportation sponsor and the private transportation companies had developed a sound, efficient, and effective working relationship and that both parties felt that there were benefits to their side in doing so.

Two of the cases, Kern County and CTA, demonstrated that competitive bidding led to cost savings and increased efficiencies in service effectiveness. CTA-operated suburban service, for example, had previously cost $28 per passenger, whereas the use of private contractors under competitive bidding subsequently reduced the cost by 55 percent to $12.50 per passenger. Similarly, in Kern County (California) significant cost reductions and productivity increases resulted where shifts were made to the private sector through competitive contracts.

Systems such as Cape May County and Sampson County Department of Social Services, which have historically operated their transportation services totally in-house, realized substantial cost savings, productivity and efficiency improvements by shifting over to private contractors. Cape May County, for example, in its first year of private contracting for fixed route service found a 14 percent reduction in the cost per vehicle mile and the 110 percent increase in the passengers carried per vehicle mile. Similarly, the Sampson County Department of Social Services realized an 81 percent reduction in the cost per vehicle mile and a 68 percent reduction in the cost per passenger in shifting from social workers as drivers to using a taxi company.

In addition to documentation of cost savings, productivity and efficiency increases, the case studies also demonstrated other important factors of success in using private operators. Canon City, for example, showed that

the high level of personal commitment and cooperation between the project sponsor and the private taxi company created public service where none had existed before. Both Cape May County and Chester County demonstrated the importance of involving private transportation companies in the evaluation and advance planning activities of the local government. One factor that seemed to be common to most all cases was the positive attitude and belief by local officials and leaders that the private sector's better efficiencies and the profit motive could be strong causal factors in realizing both cost effciencies and better productivities than government was capable of.

Chester County has demonstrated improvements in productivity and cost efficiency via the same private operator over time, which contradicts the notion that once private operators are contracted they will attempt to decrease their efficiency and increase their income and profit. The presence of a respected, stable, and skilled transportation operator in the local area was an important influence in several locations, especially rural areas, in deciding to utilize the private sector. Hawaii County demonstrated that a combination of private for-profit and private non-profit contractors could succeed. In Lawrence, the bus system and in West Chester the Chester County Paratransit System showed that government intervention and involvement in managing and controlling services can be minimized.

Finally, strong state and/or local funding for Kern County, Lawrence, Chicago, Chester County and Cape May County showed that systems can be developed and maintained with little or no UMTA funds. Four of the eight cases utilized no UMTA operating funds at all. Three used between 16 and 25 percent UMTA funds and one utilized a marginal amount indirectly through involvement of administrative staff time. Consequently, the case also showed that governments can successfully utilize private subcontractors without relying on UMTA funding. Although there does not appear to be one best approach from cases examined, there are several important lessons and concepts that emerge from the cases. The following summary lists those important conditions or factors that have been instrumental in fostering successful private sector involvement:

1. Availability of competent professional contractors interested in doing public business.

2. A source of funding which supports initial implementation and allows for short-term growth.

3. A positive attitude among local elected officials supportive of utilizing the private sector whenever feasible.

4. The commitment of both local officials and staff to continually strive for high degrees of cost efficiency, service productivity and quality.

5. A capability to screen and evaluate prospective subcontractors with respect to their soundness, professionalism, successful track record, and commitment to improving cost efficiencies and service productivity.

6. A monitoring and evaluation program or procedure that minimizes paperwork burden on contractors yet allows accurate assessment of service.

7. A resource for technical and/or management assistance and external evaluation of the service.

8. Establishment of a positive working relationship between government staff and private contractors.

9. A staff person within government to administer or oversee the contracted services who has good interpersonal relationship skills and is open-minded to experimenting with new service concepts.

10. Persistence.

CANON CITY SUBSIDIZED TAXI PROGRAM

CANON CITY, COLORADO

CANON CITY SUBSIDIZED TAXI PROGRAM
Canon City, Colorado

INTRODUCTION AND HISTORY

The Canon City Subsidized Taxi Program (CCSTP) demonstrates the effectiveness of volunteerism in rural America; an example of civic commitment, dedication, and simplicity in design in one system. This is a service that is simple for people to administer and to use. It is a good example of the belief that every idea needs a champion to make it work and that civic pride can also be influential to success.

Canon City is located approximately 110 miles south of Denver. The City has a population of 15,000; the surrounding area's population is 23,000; and the total population of Fremont County is 32,000. The City occupies eight square miles with a population density of 1,875 persons per square mile. The County has an area of 1,538 square miles and a population density, of 18.6 persons per square mile. According to the 1980 Census the County's population aged 65 and over is 17.7 percent; the comparative figure for the U.S. is 11.3 percent. With a sizable retired population, it is not surprising that local retirees have an active chapter of the American Association of Retired Persons (AARP). In fact the Fremont County Chapter is the fifth largest out of 3,500 chapters nationally. Several state prisons are located around Canon City and serve as major traffic generators.

The Subsidized Taxi Program was started in July 1979 by the local AARP Chapter to fill a void in public transportation services. At that time, one taxi company was in operation and on the verge of going out of business. No other intracity transportation was available. In 1979 Frank Romanick, a retired Navy Captain, was President of the Fremont County Chapter of AARP and a member of the local transportation planning board. He, along with others, recognized a need for improved transportation in the area, especially for the growing number of senior citizens living in and around Canon City.

Mr. Romanick believed that a transportation service could be operated successfully through the AARP by contracting with the local cab company to provide the service. There were no plans for using vans or operating the service themselves since the taxi operator was an existing resource that could be tapped. If the arrangement worked it would benefit AARP, the taxi operator, the users and the community. In the beginning there were not many people who thought the service would work, but a few believed it would

and decided to give it a try. The major actors in this case had absolutely no evidence that such a service would be successful; they simply believed that people would respond.

An extraordinary thing happened during fund-raising for the new service. Mr. Dave Golden, then Vice-President of the AARP Chapter, was committed to doing his share to make the service a successful reality. To support this commitment, he made a $3,000 personal, no-interest, no-contract, no-time limit loan to AARP. This, along with an additional $4,200 raised in the fund-raising effort was enough to start service in November of that year, saving the taxi company from going out of business. The Subsidized Taxi Program was started with 100 percent private funds. The initial $7,200 raised by AARP was used to subsidize users. Riders paid 50 percent of the trip cost and AARP paid 50 percent. The service was advertised in the AARP newsletter and other sources of community information.

In 1980, Frank Romanick, as President of the local AARP, applied for UMTA Section 18 funds and an award was made for approximately $2,000 by the Colorado Highway Department. AARP raised another $2,000 and users paid the balance of the cost for that year.

In 1981, Canon City and Fremont County funded the program replacing AARP. In this third year of operation, Federal dollars accounted for 25 percent of the costs. City/County funds accounted for another 25 percent, and the remaining 50 percent was paid by users. This funding formula remains in effect at the present but at a higher level.

The commitment and persistence of people like Frank Romanick and Dave Golden made this service possible and Mr. Romanick's unselfish volunteer efforts keep it going. They believed in an idea in the face of an "it can't be done" attitude and their efforts paid off.

FINANCIAL AND OPERATING DATA ANALYSIS

The Canon City Cab Company provides service, through contract, to the Subsidized Taxi Program. The company is owned and operated by Mr. and Mrs. Scott Herbert who bought the business from its previous owner two years ago. They employed five drivers at $3.35/hour and operate 24 hours a day, seven days a week. Before buying the Canon City Cab Company, Scott Herbert worked for an ambulance service in Denver. His drivers are trained in passenger assistance techniques, emergency procedures and life saving techniques. The Company also provides transportation for the local service agencies.

Service is provided using four autos (one of which is back-up) ranging in age from 1978 to 1980. All vehicles are equipped with two-way radios and

the base is manned 24 hours a day. The vehicles are maintained in good operating condition and all maintenance is performed by a licensed mechanic. Preventive maintenance is performed according to rigid guidelines.

In 1986, the company carried approximately 28,000 passengers. Of these, 19,400 (69%) were Subsidized Taxi Program riders. As shown in Table 1, the service logged 42,000 vehicle miles in 1986 for the CCSTP resulting in 0.46 passengers per vehicle mile. Cost per vehicle mile is estimated to be $0.50 for the CCSTP portion of the service.

Fares are set at $2.00 per trip within a given zone and increased as zones radiate out from the City. Each additional zone requires an additional coupon. Un-subsidized taxi fares do not use a zone system; fares are $1.35 for pick-up and $1.00 per mile. Service is available to the general public on a first-come, first-served basis. Two dollar taxi coupons are sold in books of ten for $1.00 each. AARP sells the coupon books on the last working day of each month at the Golden Age Center. Those persons not able to obtain a book of coupons are placed on the top of a list for the next month. The number of books sold is limited to a available funds. Through experience, the number of books sold varies somewhat according to seasonal demand.

Table 1.1
Canon City Case Study Summary Statistics

1) Service Area Population	32,000
2) Area	1,538
3) Population Density	18.6
4) Annual Vehicle Mileage	42,000
5) Annual Vehicle Hours	5,800
6) Annual Passengers	19,400
7) Total Budget	$42,000
8) Operational Budget	$21,000
9) Passengers/Vehicle Mile	0.46
10) Passengers/Vehicle Hour	3.3
11) Cost/Vehicle Mile	$0.50
12) Cost/Vehicle Hour	$3.62
13) Cost/Passengers	$1.00
14) Subsidy/Passengers	$1.00
15) UMTA $ as % of Subsidy	25
16) Farebox Recovery (Percent)	50
17) # Vehicles at Peak	4
18) Total Operating Expenditure	$21,000

Source: Mr. Frank Romanick, AARP Fremont County Chapter and Canon City Cab Company, July 1987.

AARP also sells a small number of coupon books (about five a month) to Families and Friends of Convicts United for Support (FOCUS). FOCUS provides transportation for visitations to the correctional facilities located in the Canon City area. The service is provided on weekends with a donated church van driven by a Canon City Cab Company driver. FOCUS buys the coupon books for $1 a coupon. When used, the coupon is worth $2; the remaining $1 is covered by the program subsidy. Thus, FOCUS pays the Cab Company in coupons for the service provided.

The Cab Company turns in the collected coupons each Monday and is paid by AARP. AARP, in turn, mails a request for reimbursement at the end of the month to the Colorado Department of Highways, the City and the County.

The recordkeeping system is very simple. One ledger is maintained for the sale of taxi coupons and another is kept for the payment of coupons used. A monthly bank statement is balanced by the AARP Treasurer and the books are audited every year.

The portion of the Cab Company's business attributed to the AARP contract has changed somewhat over the years. For example, in 1980 gross sales were $66,000 and the AARP subsidized service accounted for only 12 percent of sales (Figure 1.1). By 1986, AARP subsidized service accounted for $39,000 of the $81,000 in sales or 48 percent. However, in 1986 estimates reveal that 69 percent of the total ridership was attributed to the AARP program. This is due, in part, to lower fares for coupon holders versus cash paying customers. The subsidized taxi ridership includes: General Public - 10%; Elderly - 85%; and Handicapped - 5%.

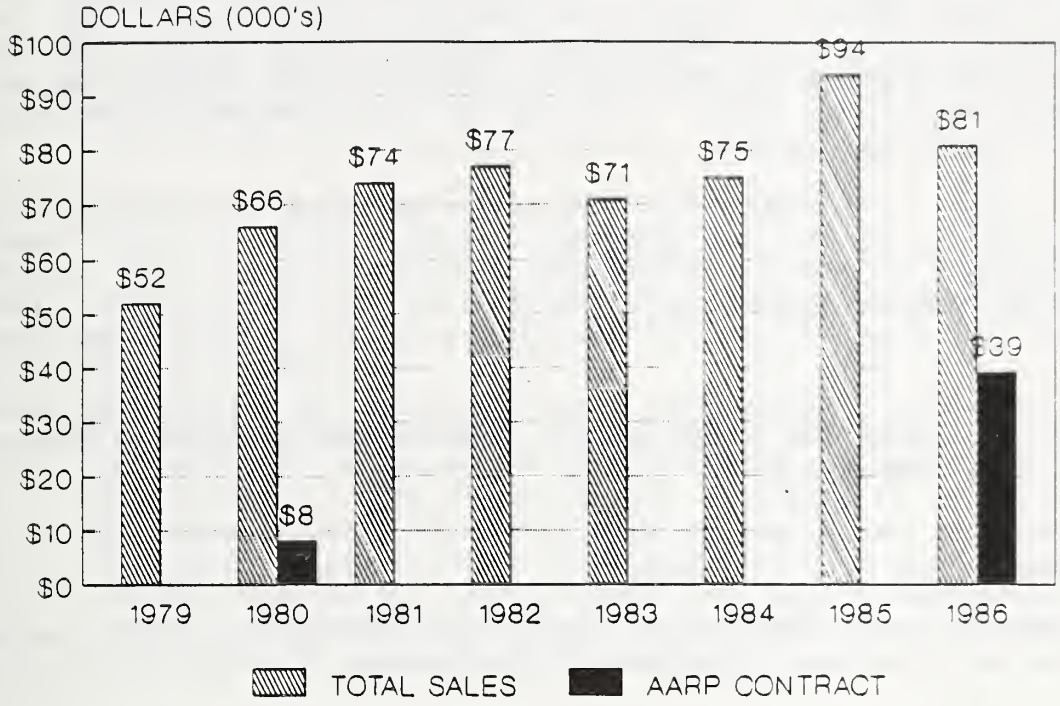
OVERALL IMPACT AND CURRENT STATUS

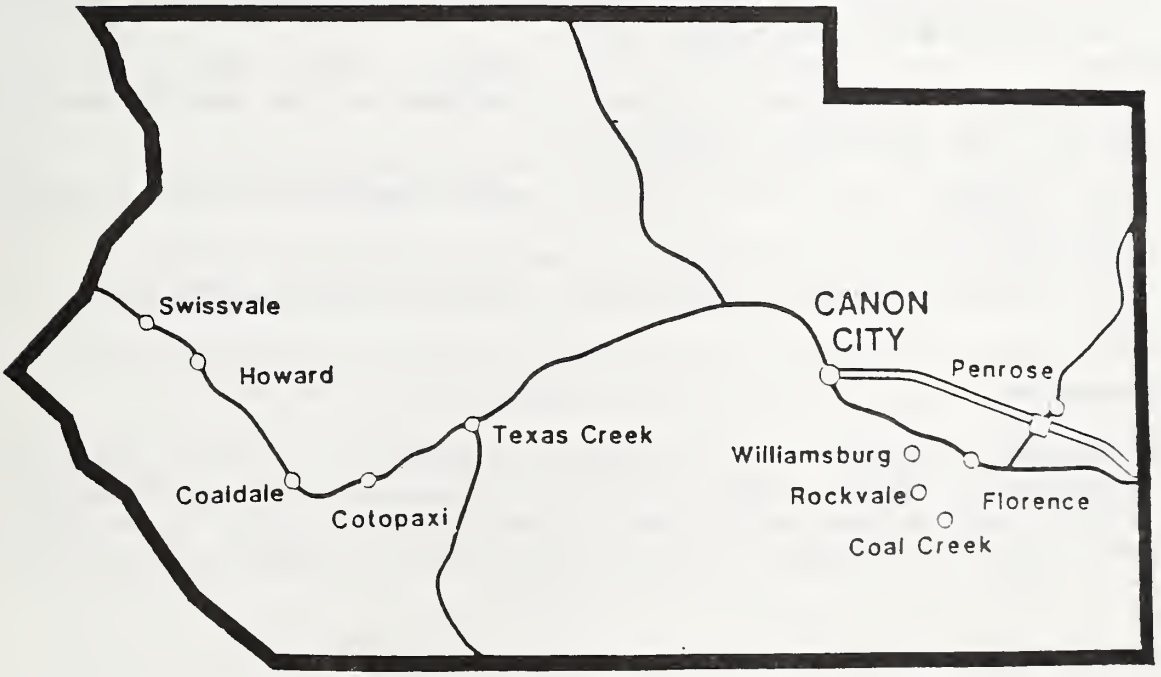
The goals and objectives of the Canon City Subsidized Taxi Program are to provide reasonably priced transportation to the residents of the Canon City area especially the elderly, poor and handicapped; to help older citizens achieve retirement lives of purpose, dignity and independence; expand service to areas of the country not currently being served; and to maintain current Program ridership. Most of these goals are being met given the limited resources of funding and volunteer personnel.

The 1988 application for Section 18 funds proposes limited subsidized service to Penrose and Florence on Monday and Friday and to Howard on Thursday (Figure 1.2). The proposed 1988 budget calls for a 14 percent increase overall; if approved, Section 18 funds would increase by 24 percent and Fremont County's share would increase by 60%. The County increase is due to the proposed new service to Penrose and Howard. However, the County may not be willing to increase its share that much, given financial conditions (the unemployment in the County is high: 15.6%).

Figure 1.1

CANON CITY CAB COMPANY
(GROSS SALES)





Source: Mr. Frank Romanick, AARP Fremont County Chapter and Canon City Cab Company, July 1987

Figure 1.2
MAP OF FREEMONT COUNTY

Local support for the Program is strong. The City and County continue to fund it, demand for the service is fairly well matched to available funds and users seem to be satisfied. The Colorado Department of Highways is pleased with the Program as are the City and County administrators. Administrative support is provided by a local savings institution which provides office space and donates the printing of the coupon books each year. Public and private sector relationships are good. A genuine spirit of cooperation is present among the City, County, AARP, the Cab Company, the community and the State. Problems and issues are dealt with mostly through face-to-face contact.

TRANSFER POTENTIALS

The Canon City Subsidized Taxi Program has been in operation for almost eight years. Given this experience it is possible to consider the pros and cons of such a Program.

Advantages

- The service is streamlined in design and operation which is appropriate for a program administered by volunteers.
- Users receive a high quality service for a reasonable price.
- The very presence of the Program assures that the City will continue to have taxi service. Without the Program, taxi service would be cut back drastically if maintained at all.
- Employment and economic impact is focussed on the private sector rather than government institutions.
- The Program has built-in controls which prevent it from growing haphazardly.
- This Program model is transferrable to other areas of similar size.

Disadvantages

- Successful operation of the Program is dependent on the cooperative relationship between AARP and the taxi operator. If Frank Romanick retired and was not replaced with a person of equal zeal, the Program may falter. Likewise, if Scott Herbert were to leave and was not

replaced with a private entrepreneur with his spirit of cooperation, the Program would be threatened.

- This Program model would not work well in a much larger area without major modifications and complications.

- The Program is dependent on one provider and one mode of transportation making it vulnerable to business fluctuations and personal business decision.

When transportation programs are studied to determine the reasons for their success, one is tempted to develop "formulas for success" so they can be used by others. Such formulas do not exist. However, if experience has taught us anything, it is that certain critical elements must be present for success to occur. For a program like the one in Canon City the critical elements are as follows:

1) Someone to administer the program who is not stopped by adverse circumstances; someone who doesn't necessarily know what it will take to make a program work, but is willing to do whatever is necessary; someone who keeps sight of the ultimate purpose rather than getting bogged down in extraneous issues and problems; someone who has the zeal to push forward, yet works cooperatively with others, acknowledging them for their contributions; and someone who understands the concept of community.

2) Someone to operate the service in a responsible manner with trained drivers and well-maintained, safe vehicles. A person(s) with a vested interest in the program which will show up in how customers are treated.

3) A high quality service that meets user needs at a reasonable price.

4) An initial source of funds sufficient to "sell" the program through demonstrated operation.

5) Stable and multiple sources of funding for program continuation and possible expansion; and

6) Alternative sources of funding, or the ability to create them, in the event of a cut in primary funding.

CAPE MAY COUNTY DEPARTMENT OF TRANSPORTATION

RIO GRANDE, NEW JERSEY

CAPE MAY COUNTY DEPARTMENT OF TRANSPORTATION
Rio Grande, New Jersey

INTRODUCTION AND HISTORY

Cape May County created a Department of Transportation in 1973 for the purpose of operating a senior citizen shopping transport service in the southern one-third of the County. This service was initiated by the county at the request of a group of senior citizens from the south County area who had been using a donated Air Force bus to provide service and wanted the County to assist with the maintenance expenses.

In 1975, the service was expanded to include medical transportation. In that same year, County staff and most of the human service agency directors in the County collaborated to turn their vehicles over to the County along with about 95 percent of their client transportation funds in turn for the County taking responsibility for client transportation. By 1980, further major expansions were made to add all nutrition center transportation, home-delivered meals plus a fixed route work trip service in the early morning and late afternoon.

From its beginning, the County-sponsored system was called the "fare free transportation system". County, State and Federal human service transportation funds were used to pay for the total cost of service without charging any fares to the riders. Seven years after its beginning, the system began using UMTA Section 18 rural transportation funds in 1980. These funds were targeted primarily to develop the fixed route work trip service, but also provided some support for the system's overall expansions of its demand response and midday fixed route public service.

Private sector involvement in Cape May County was not seriously considered until early 1986 within the context of a State-mandated transportation planning study. One of the original objectives set for this study by the County was to assess the overall demand and supply of transportation in the County including the potential for utilizing private transportation companies. The timing of this effort coincided with UMTA's then recent private sector involvement policies and initiatives which both staff and the Board of Freeholders (County government) were aware of, especially being a recipient of UMTA funds.

In addition to the Federal and State policies requiring Cape May County to consider the use of transportation companies, the Freeholders and Director

of the Department of Transportation also indicated at the outset of the planning study that they had a philosophical interest in considering the private sector that was twofold. First of all, the local officials expressed a probusiness attitude that should attempt to utilize the private sector when feasible instead of building up government staff. Secondly, the Freeholders and Transportation Director felt that the County should refocus its internally-operated services on paratransit and the needs of the elderly and handicapped, while considering other operators for line haul work, trip-oriented service. One of the reasons for this attitude at the time was that the County system had primarily a paratransit-type fleet including a number of conventional school buses which were being used for the work trip services. At the same time, the County was aware that there was at least one private bus company in the County (Five Mile Beach Bus Company) that had a fleet of standard size transit coaches that would be more comfortable, longer lasting and able to carry more passengers on a fixed route, commuter-type service.

Consequently, a number of factors in the form of local attitudes and realizations came to bear along with a new State planning requirement and UMTA policy to consider private sector operators. The nine-month planning process utilized by the County during 1986 created a Study Advisory Committee which invited all local private operators to participate. Letters were sent to all private transportation companies in the County, notifying them of the study and the opportunity for their participation if they so desired. From among the several taxi companies and three bus companies identified, one, the Five Mile Beach Bus Company of Wildwood, New Jersey expressed interest in the possibility of operating the County-sponsored service. The President of this company participated closely throughout the entire study process.

Cape May County's transportation system is noteworthy nationally as one of the first countywide consolidated human service and general public transportation systems in the United States. The County has a relatively large proportion of senior citizens who are year-round residents (27 percent of total population). Consequently the County and its Board of Freeholders have historically been sensitive to the needs of senior citizens which always includes transportation. As a result the County has, unlike most rural counties, financed a major portion of its system from local tax revenues instead of relying primarily on State and Federal funds. The development of New Jersey's Casino Revenue Program which provides funding for counties to operate specialized transportation, substantially changed the situation for Cape May County in 1985 when it was able to begin using these funds which helped constrain the increases in County tax support.

In 1984, for example, the County paid for 45 percent of the cost of the system with local county taxes. The balance was made up of Title III Older American's Act at 14 percent, Title XX Social Services Block Grant at 25 percent and UMTA Section 18 at 16 percent of the total operating expense. For 1985, the first full year of Casino Revenue Funding utilization, the share supported by local funds was reduced to 39 percent with the Casino

Revenue funds adding 11 percent, Older American's Act funds were reduced to nine percent and Title XX and Section 18 remaining at the 1984 ratios. For fiscal year 1987 it was estimated that the total County cash contribution would be about 48 percent. Eleven percent of this amount would be for supporting the meal van services, which of course is not passenger transport. All other funds from the County would be for passenger transportation.

This is not a typical financing situation for rural transportation systems. Usually, it is just the opposite whereby local governments have minimized their financial contribution and maximized the use of UMTA, other Federal and State funds. Based on their past track record and the results of interviews for this study, it would appear that there is no doubt that public transportation will remain in the future of Cape May County even though Federal transit and/or human service funds may be reduced substantially. The countywide transportation system has evolved into a major public service of County government and is a service that constituents have come to expect along with other regular public services. Although the situation is somewhat unique for rural areas, it certainly bodes well for the County's ability to sustain a transportation system irrespective of the availability of Federal transit operating assistance.

Environment

Cape May County is well-known as a major coastal summer resort in the northeast. The official 1980 population of Cape May County was 82,266. During the peak tourist summer months the population in the county is about double this amount. Well-known vacation destinations such as Ocean City, Avalon, and the Wildwoods lie just on the coast of Cape May in a chain of barrier islands that stretch from the southern-most portion near the Town of Cape May to the northern-most border of the county near Atlantic City. In the summer months, these islands are densely populated with vacationers. The mainland portion of the county also experiences a substantial population increase which is primarily accommodated in campgrounds. The county has 48 campgrounds which account for over 13,000 camp sites. Campers come to the area for swimming and recreation on the barrier islands. Consequently the traffic congestion and movement back and forth from the mainlands to the the islands during the summer months is quite heavy. The travel demand is sufficient enough that the Five Mile Beach Bus Company is able to put on several additional fixed route buses plus operate a number of trackless trollies on the Wildwoods and Ocean City which are solely tourist oriented. The transportation service operated by the County DOT is virtually all oriented toward the permanent resident. The only service for tourists is provided by the private operator.

In addition to the impact of tourism on the County, the growth and development of the casino industry in nearby Atlantic City has also had a major impact as an employment center for Cape May County residents. For 1985, it

was estimated that about 2,700 Cape May County residents were employed in Atlantic City facilities. Reportedly, a substantial number of these employees utilize the innercity bus service provided by New Jersey Transit which originates each day in the Town of Cape May traveling northward to Atlantic City and beyond. The year-round employed population of Cape May County tends to commute away from their residence to a relatively high degree, with 64 percent of all commuters traveling to jobs outside their municipality or township of residence. It is also important to note that commensurate with the relatively high proportion of persons 60 and over in Cape May County, that the prevalence of households with no automobiles is also relatively high at 13 percent. Most rural areas, in the Consultant's experience, tend to average closer to 10 percent of such households.

Service Description

As described above, the Cape May County system has grown and evolved substantially over the years from a senior citizen shopping service in 1973 to a diversified system which currently offers: 1) two scheduled fixed route bus routes oriented towards work trips; 2) scheduled route deviation shopping-oriented service generally from mid- to late-morning; 3) scheduled weekday subscription service for human service agency clients to and from agency centers; 4) door-to-door demand response service oriented to medical and agency trips; and 5) meal deliveries to group facilities and homes for about 2,000 home-delivered meals per month and about 6,000 bulk meals to the County's six senior citizen centers. These services are organized into approximately 22 different daily schedules or routes with most drivers providing two or even three of the five types of service noted above.

The service plan completed in 1986 adopted by the County called for a transition of fixed route services over to the private sector. The first segment of this changeover began in April 1987 when the Five Mile Beach Company began operating the County's two fixed route work trips. In April, the southern County route started with 19 individuals and as of late May, 1987 had increased to 40 riders and 60 by June; and the north route which started with eight riders had grown to 15. Both the County and the private operator are pleased with this result in that the new service has been able in a short period to accomplish significant growth over what the County was doing. It is also interesting to note that the private operator, as agreed to in the County plan, has been using its State-approved 85¢ flat fare structure for trips within the County. By way of comparison, the New Jersey Transit intercity bus route charges $1.00 for the same service.

In addition to the takeover of the two fixed routes, the plan also called for a major promotional expansion of the private operator's other fixed route schedules to allow senior citizen to ride free of charge with the County paying the private operator a fare subsidy of 40¢ per trip. This service began in March with 400 senior citizens utilizing the service, growing to 1,300 in April, and 2,000 by May. These figures represent a 25

percent growth over the senior citizen ridership on the private operator's buses for the same months in 1986.

FINANCIAL AND OPERATING DATA ANALYSIS

Table 2.1 presents a direct comparison of financial and operating data for the same two fixed route early morning and late afternoon work trip services which were operated by the County through 1986 and taken over by Five Mile Beach Bus Company in early 1987. The table also shows the percentage changes which have resulted in the service. It is important to note that the data for the County-operated services are for fiscal year 1985, whereas the data for the same service by Five Mile Beach Bus Company is based upon the first few months of operation April through June 1987. Consequently, if the financial figures for the two different columns were both equated at present day value the differences between the two may even be more dramatic. Figure 2.1 displays the six comparative performance indicators from Part B of Table 2.1.

The service analyzed in Table 2.1 is only that portion of service for which the County and Five Mile Beach Bus Company have entered a direct operating contract. This data does not include the user side subsidy program for which the County DOT pays a portion of the fares for senior citizens to ride the Five Mile Beach buses. Consequently, the data in Table 2-1 is a direct one-to-one comparison of the same two routes covering the same five-day-a-week schedule of service with the only difference being the operator.

It is clear that the utilization rate of the system has increased substantially. This was one of the goals and expectations of the County DOT in making the decision to subcontract since Five Mile Beach was able to utilize more comfortable air-conditioned standard transit coaches compared to the County's use of school bus-type vehicles. In this regard, both the sponsors' operators, and customers have reported an increase in the satisfaction and acceptance of the service due to comfort and convenience of the new vehicles.

One of the reasons for the significant reduction in vehicle mileage and vehicle hours by the private operator is that the peak fleet has been limited to two coaches. The County, on the other hand, needed to use a combination of five vehicles and drivers, each operating relatively small segments daily due to the need for those drivers and vehicles to be used in other DOT service.

Another important major cost difference which both the County and the private operator knew would result in some savings before entering the contract was the wage differential between the County drivers and the Five Mile Beach Bus Company drivers. This 23 percent difference also certainly

Table 2.1
CAPE MAY COUNTY OPERATING AND FINANCIAL INDICATORS

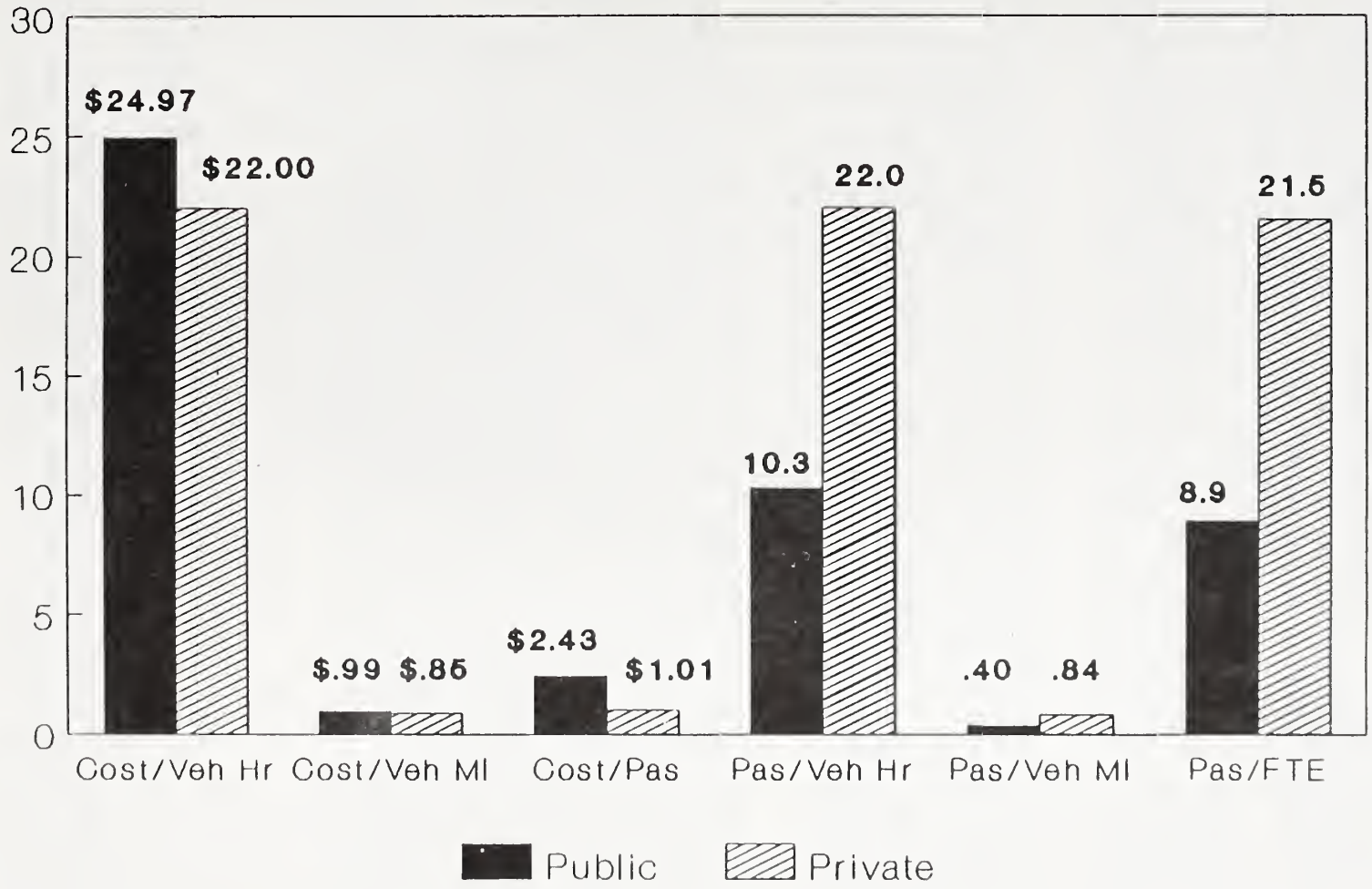
Item	County-Operated Fixed Route Work Trips - FY 85	Same Routes By Bus Co. FY 87 (1)	% Change
A. Base Data			
Passengers	18,733	27,900	(+49)
Peak Fleet	3 school buses	2 transit coaches	(-33)
FTE Employees	2.1	1.3	(-38)
Average Driver Wage	$7.48/hr.	$5.75/hr.	(-23)
Fare Charge	none	85¢ flat fare or book of 20 for 73¢ ea.	--
Vehicle Hours	1,826	1,270	(-30)
Vehicle Miles	46,120	33,100	(-28)
Operating Cost	$45,600	$28,100	(-38)
B. Performance Indicators			
Cost/Vehicle Hour	$24.97	$22.00	(-12)
Cost/Vehicle Mile	98.8¢	85¢	(-14)
Cost/Passenger	$2.43	$1.01	(-58)
Passenger/Vehicle Hour	10.3	22.0	(+114)
Passenger/Vehicle Mile	.40	.84	(+110)
Passenger/FTE Employee	8,900	21,500	(+142)

Source: Cape May County DOT and Five Mile Beach Bus Company, May 1987 and Cape May County Transportation Study and Comprehensive Plan, November 1986.

(1) Figures for passengers, hours, miles and cost are estimates based on service operating agreement and plan and first three months of actual operating data, April - June 1987.

Figure 2.1

Cape May County
Performance Indicators



Passengers/FTE in thousands

Source: Cape May County DOT and Five Mile Beach Bus Company, May 1987 and Cape May County Transportation Study and Comprehensive Plan, November 1986

has major impact on the overall cost differences. Another major change in the shift to the private operator included a decision by the County to institute a fare charge for the fixed route work trip services. This change was decided to be made irrespective of who operated the service. Before deciding to make this change, the County carefully considered the possible negative impacts and ridership loss as a result of the fare charge. The use of the 85¢ flat fare had no perceptable negative impact since most customers perceived the change to be a reasonable one and in fact has been associated with ridership growth.

The County and contractor have a service contract which stipulates the number of vehicle hours and rate of pay for the bus company. This rate was set at $22 per vehicle hour as were the daily vehicle hours for each of the two routes since the County had long-standing experience with operating that service.

The changes in all of the performance indicators in addition to the overall operating expense and resource consumption reductions are clearly quite dramatic. Obviously, the combination of the private operator's lower wage structure and their ability to provide the same level of service with less resource consumption, increases the cost efficiency and productivity differences. It is the productivity increases which are perhaps the most dramatic of all changes ranging from an increase of 110 percent to 142 percent for such measures as passengers per vehicle hour, passengers per vehicle mile, and passengers per full-time employee.

Finally, it should also be noted that the annualized passengers for the private-operated routes is based upon the ridership experienced during the first few months of the system and in the spring months through and including May. In actuality, during the months of June and July the South County route which had reached 40 riders by the end of May had added another 20 individuals per day throughout June and July. Since some of this added ridership may be attributed to employment increases during the high tourist season in the summer months (June through Labor Day) the ridership could drop back down somewhat by September. Even if it does, however, the ridership will still, in all likelihood, exceed the annualized figures shown in Table 2-1 since it is based only on the earliest initial months' ridership of the system. Consequently, by the end of 1987, it can be expected that the performance indicators and data for the service will exhibit even higher levels of productivity and cost differentials than that which has occurred during the first three months.

OVERALL IMPACT AND CURRENT STATUS

From the preceding financial and operating data analysis, it is clear that there have been substantial favorable benefits both in terms of productivities, efficiencies, and cost differences by utilizing the private sector

for the fixed route service in Cape May County. With respect to the County DOT's goals and objectives, it appears that they have not only been met, but exceeded. In early 1986 when the county embarked upon its planning study, among seven overall objectives for the planning effort the private sector transportation operators were to be assessed along with the county system to determine whether or not there was a role for private operators. In embarking upon this planning study, the county did not have a strong position statement or written goal at the time to substantially involve the private sector. During the course of the study, however, which included a comparative evaluation of the county operation and the Five Mile Beach Bus Company, it became apparent to the County DOT and the Freeholders that there was good reason to pursue the possible transfer of fixed route operations to a private bus company. By the time this planning effort was completed in the Fall of 1986, a strong consensus also existed among human service agency officials as well as the DOT and Board of Chosen Freeholders, that the private sector should be utilized.

In addition to the financial and operating efficiency and success of this privitization effort, it appears that on a qualitative side the County officials, agency staff and riders are quite satisfied with the private sector operation. In addition to the clear success of the fixed route, it is equally important to the county and residents that the user subsidy arrangement whereby senior citizens receive 100 percent fare subsidy on any of the Five Mile Beach Bus Company's fixed routes, has also been a success. As reported above, the ridership on the privately operated fixed routes (over and above the early morning and late afternoon fixed route work trips) have enjoyed substantial ridership increases each month since its beginning. Through the accounting of senior citizen's passes and tickets, senior citizens being the source of this ridership increase has been documented. Consultant interviews in Cape May County included DOT staff, the private operator, agency directors and riders, all of whom reported a high degree of satisfaction with the privatized service.

Public and private sector relations in Cape May County associated with this new service are quite positive. One long-term goal which was developed by the County during its planning study was the desire to have the public system which had grown and diversified substantially from its beginning, "get back to what its original mission was" which was focusing on the transportation needs of the elderly, handicapped, and those needing transportation assistance.

Both County officials and the private sector agreed that a viable private fixed route operator should be able to operate such service which tends to be oriented towards work trips as well as seasonal tourists and should remain the province of the private sector. Thus a philosophical concurrence seems to exist between government and the private sector as well as the non-profit human service agencies in Cape May County. It is also interesting to note that the private bus operator in Cape May County has repeatedly expressed the desire which the County has accepted to eventually

either eliminate or at least substantially reduce the amount of subsidy which the County has to pay the private operator. It is their desire and belief that latent transit demand in Cape May County is substantial enough with the exception of capital assistance for purchasing equipment, the annual operating expense of the privatized service should ultimately become self-sustaining operationally. Both the County and private operator are aware that their ultimate goal may not be possible, but still profess a desire to at least reduce subsidy over the long term. In the Consultant's opinion, this may be possible in the sense that subsidy per passenger and subsidy per unit of service may be decreased because of increased ridership and demand densities. On the other hand, overall service growth should increase the absolute subsidy needed because of overall service level increases.

Finally, one of the most unique findings in the case of Cape May County has to do with the high level of local financial commitment to support transit in such a rural county. With UMTA operating assistance only accounting for 16 percent of the total annual system operating revenues, it is clear, and County officials expressed the attitude that if UMTA funds were eliminated the County's transportation system would continue. Given Cape May County's strong political and financial commitment to public transportation that has now been bolstered substantially by the addition of the Casino Revenue Funding Program, public transit certainly seems to have a bright future in Cape May County.

TRANSFER POTENTIALS

The approach to privitization taken by Cape May County is one which seems to give government and the private sector a mutually acceptable and beneficial balance of services. The County has operated a diverse mix of paratransit and transit, public and non-public services since the early 1970's. Having gone through the experience of trying many types of services and succeeding with most and failing with a few, this County seems to have evolved to a point in its attitudes and beliefs that the officials and staffs truly believe there are certain things the private sector can do better than government. In this particular case, the presence of a successful fixed route transportation company which is interested in staying in fixed route service and expanding that base, fit well with the County's new goal to spin-off certain elements of its transit system to the private sector. At this point in time at least, the private operator has no desire to operate demand responsive door-to-door subscription type services. Also, the few small taxi companies in the County expressed preferences to not be involved in government sponsored transportation. Although attitudes and opinions may change in the future, at present there appears to be a compatible and successful relationship between the DOT and the private

sector in Cape May County. The County's willingness and desire to continue to serve the remote outlying areas fits well with the private operator's desire to focus on more populated areas where higher productivity and profitability can be attained.

Cape May County is another example of the local government officials having a positive attitude towards the involvement of the private sector whenever possible. In support of this, the agency directors and County staff also seem to believe in the notion that the private sector could do the job. In the Consultant's experience, it was relatively unusual to find a County where human service agencies are not reluctant and in fact had almost immediate acceptance of the idea of using the private sector to provide transportation to their clients.

Perhaps the fact that for senior citizens at least, the major impact for them was to expand transit opportunities rather than reduce them or totally change the method of operation. The County continued its door-to-door services and scheduled subscription services to agency clients while through the new user subsidy program, senior citizens now have greater accessibility to fixed route services. This is certainly not the same case as taking an existing system and totally converting it to private sector operation or substantially modifying or reducing the nature and level of services provided.

Finally, it was the private bus company owners' opinion that the County's decision to undertake a planning study to re-examine its transportation operation and consider alternatives was a critical and instrumental factor in gaining consensus to privatize certain service elements. In this same context, both DOT staff and the private operator felt that it was worthwhile to take an incremental approach to privitization and go slow at first to make sure that it works.

A final qualitative element in gaining the interest of private sector in the first place has to do with the finance of the County system. In the course of the planning study that was conducted, it became fairly well known to all government and private sector participants who were not already aware, that Cape May County provided the greatest share of financial assistance for its own transit system. The fact that there is this high degree of stability and security due to local commitment gives the private sector the feeling that there is a long-term future in being involved with local government-sponsored service regardless of what may happen with Federal funds.

CHESTER COUNTY PARATRANSIT SYSTEM

WEST CHESTER, PENNSYLVANIA

CHESTER COUNTY PARATRANSIT SYSTEM
West Chester, Pennsylvania

INTRODUCTION AND HISTORY

The Chester County Paratransit System (CPS) is a county-wide public demand responsive and subscription door-to-door system that is operated totally by a private bus company under the sponsorship of Chester County Government.

Since the system's beginning in 1983, it has utilized only Pennsylvania Lottery funds, six other human service agency funds and public fares but no UMTA monies. Between 1979 and 1980 the local community action agency attempted an experimental rural transportation service utilizing FHWA Section 147 Demonstration funds. The service operated for approximately one year and was terminated at the end of the demonstration funding grant. That original grant did not involve local funding nor any substantial county government involvement. It was primarily initiated by the community action agency and several other human service agencies.

In addition to this short-term experimental rural and coordinated human service agency transportation, Chester County has long been served by a limited amount of fixed route bus service operated by SEPTA from Philadelphia and has a SEPTA main line rail system serving the eastern-most urbanized portion of the county close to Philadelphia. The majority of this relatively large county (762 square miles), however, is very rural. Consequently, the three routes operated by SEPTA and one additional fixed route conventional bus service operated by a local private bus company have only been used by a relatively small portion of the Chester County population.

In 1982 the Pennsylvania legislature amended the state transportation funding programs provided with revenues from the Pennsylvania lottery to include, for the first time, door-to-door demand responsive service for senior citizens that did not require substantial local matching funds. This gave Chester County a new opportunity to provide a public service that would meet the needs of human service agencies, senior citizens and other general public.

Historically, Chester County had preferred to avoid utilizing UMTA transit subsidies, with the exception of the 16(b)(2) program, reportedly in order to avoid what was felt to be a substantial commitment of county funds as well as a lot of new paperwork, regulations and requirements. The county's

commitment to public transportation had historically always been through the allocation of annual subsidies to SEPTA in order to assist in supporting the rail line and limited fixed route bus service in Chester County.

Private sector involvement in the Chester County system was a given from the outset due to the program requirements and priorities established by PENNDOT. The program regulations placed strong and substantial emphasis on attempting to utilize private transportation companies who held certificates with Pennsylvania Public Utility Commission for shared-ride operations and had a published shared-ride tariff. Counties were also allowed to start their own county-operated system or else utilize one that was already in place. For a County with desires like Chester, however, the program guidelines were designed such that a system which was totally operated by the private sector and coordinated and overseen by the County would not require the commitment of significant county funds. It should be noted that Chester County developed its own fare structure which the designated operator is required to use by County policy which has been accepted by PENNDOT.

Also, the Chester County Board of Commissioners have historically favored the use of the private sector and the minimization of government intervention and government operations where the private sector can do the job. Hence the State funding program requirements to involve the private sector were well-suited for Chester County. Other factors contributing to the County's decision to utilize the private sector were: 1) desire of the Commissioners to not create other agencies or organizations in government if it could possibly be avoided; 2) the County Commissioners' position that a major financial investment of local funds in public transportation was simply not warranted; and 3) a desire for the County to not be a system operator and to instead rely upon the private sector if at all possible.

With the County Commissioners' and staff's strong orientation towards minimizing government intervention and maximizing the use of the private sector where possible, the County paratransit system, as sought in its original system plan in 1982, has evolved into a rather unique situation for Pennsylvania. Just this past year the County in response to a new requirement from PENNDOT to designate a single coordinator of all shared-ride paratransit services in the County designated its private contractor to fill this role normally taken by government. Chester is the only County that has designated a private operator as coordinator. From the beginning the Commissioners have had an objective to attempt to "spin off" as much of the management, operation, oversight and coordination of the paratransit system to the private sector as possible. Chester County's ideal objective would be to have the paratransit system be totally managed, operated and monitored by the private sector with little or no official County involvement. Chester County believes that the more the private sector can be used the better and the more efficient that public services are likely to be.

Environment

Chester County is relatively large for an eastern states' county at 762 square miles. It has an affixed 1980 population of 316,660. Except for the suburban concentration in the eastern-most portion of the County close to Philadelphia and Delaware County, the majority of the County is a combination of rural and scattered small town development. Continuing suburbanization however, is coming to Chester County as the Philadelphia sphere of influence continues to spread westward and the Wilmington, Delaware influence northward. Although West Chester, the County seat, is approximately in the center and is the County's single largest town, it is by no means the major service center for the County. It is only one of sixteen major towns scattered all over the County all of which provide employment, trade, and government services to the County residents. From a transportation standpoint this factor is important to recognize because of its impact on travel patterns and thus cost. The patterns in Chester County are for people to travel almost everywhere and not just to one center. Additionally, there is a significant amount of out-of-county travel for major medical and health services trips, east to the Philadelphia area and Wilmington, Delaware to the south.

Perhaps one of the biggest factors affecting the future of the Chester County paratransit system is the substantial growth that appears to be facing the County. As noted above, the development pressures for both commercial, industrial, high technology and large housing developments have substantially increased in recent years. With this growth, of course, comes the two-fold impact of both more potential ridership for the paratransit system with more traffic congestion and thus slower and more costly service. Moreover, the nature of growth also tends to be widely scattered.

Service Description

The Chester County paratransit system began its operation in 1983 utilizing two private operators who were selected through a competitive bid process. During the first year of service it was the county's desire to proceed carefully and test the service on a small scale especially since the previous Section 147 rural demonstration project had failed. The Study Advisory Committee used for the planning study included one of the three County Commissioners, human service agency representatives, other county officials and all private sector transportation companies in the county. Given past history, it was felt that a cautious start using only two areas of the County which historically receive less services than others, should be given preference for initial service. Consequently, the southern-most one-third of the County and the northern-most quarter of the County were selected.

The southern portion of the County is very rural and is still known as the mushroom capital of the United States and is thus resplendent with mushroom "farms," dairy farms, several small settlements and towns. A relatively large transient population that is also fairly low income makes up a large portion of the southern area population due to the availability of seasonal work on farms. The northern-most portion of the county is not substantially agriculturally oriented but it is still primarily rural with very sparse population.

A taxi company known as Harp Brothers Taxi located just across the County boundary in neighboring Montgomery County, was awarded the first contract to serve the northern sector. A private paratransit transportation company operating primarily in Delaware County known as Accessible Transportation for the Disabled, Inc. was the bidder selected for the southern sector. Both companies were quite different with the northern operator being a traditional exclusive ride taxi company that had begun shared-ride operations with the advent of the PENNDOT lottery program in neighboring Montgomery County. The Accessible Transportation company on the other hand was started to meet the needs of the transportation handicapped in Delaware County, thus coming from a human service agency-oriented base.

During this trial period, Krapf Coaches, a large school bus and charter bus company headquartered in Chester County, also began operating a medicaid client demand-response door-to-door service in the central portion of the County that was not served by the new paratransit service. This service was provided under the State's Medical Assistance Transportation Program through the County Department of Public Welfare Office.

Service started in the north and south areas on November 1, 1983. The system planning and feasibility study had been completed in April of 1983. The time between May and November 1st was used by the County and its consultant to prepare for the beginning of operations.

The basis of the initial service was focused primarily upon the senior citizens who had been transported by the County Services for Senior Citizens. This was due to the fact that the lottery funding program was limited to paying the fares of persons 65 years and older. Since Senior Citizens, however, also transported persons between 60 and 64, agreements were developed for that agency to pay for the cost of the riders in that age group using Older Americans Act Funds. Also, during this startup period the State Department of Public Welfare had created a medical assistance transportation program which essentially required counties to provide for the transport of all medicaid clients in the county. Chester County understandably elected to consolidate the medical assistance transportation with the startup of its new paratransit service. By February 1984, it was recognized that the service was successful but on a very limited scale and had not yet achieved its potential cost efficiencies due to the limitation of service to the lowest density areas of the county. Also, the potential for improving efficiency and coordination of both the medical assistance transport and the paratransit service was a factor. By this time the

County decided to expand the CPS system to serve Countywide utilizing July 1, 1984 as the start date.

During spring the county notified its initial service operators that it intended to solicit bids for a single operator to manage and operate countywide service starting July 1, 1984, rather than utilizing multiple operators for different sub-areas. During this period Krapf Coaches, Inc., who had been operating the County DPW's medical assistance transport was selected as the successful bidder for county-wide service. The selection of this particular contractor was a particularly advantageous and important decision on the part of the county. Krapf Coaches happened to be the second largest school bus company in the State of Pennsylvania and in addition to providing school transportation also had long-standing experience in transporting handicapped and special needs students on smaller lift-equipped buses and more recent medicaid transport experience. While Krapf did not have experience as a demand responsive paratransit operator, the size, success and resource capabilities (e.g. central maintenance, large fleet, and ready access to paratransit type mini buses) and its successful track record with the medical assistance paratransit and school districts throughout the county, and reputation for being an outstanding and professional organization gave the county all the signs of having a sound, competent and fully capable subcontract operator.

Being a family company, based in Chester County, was also advantageous for both the company and the county since it obviously had incentive to perform well and maintain its reputation, especially now that it would be contracting directly with the County Commissioners.

This company also had the ability to lease 12 paratransit mini buses from a large local bus supplier with its own financial resources instead of having to wait upon a grant application approval process between the county and the state. This was an important capability to consider in starting up a new system in that it enabled the county to start service on July 1st rather than wait another four months for the grant application process that would have been required before new vehicles could be made available. This is a capability which the private sector brings to government services which smaller governments that are reliant on state or federal grants normally do not have.

During its first week of service in July 1984, the system carried 1,047 passengers. During the last week in July, the ridership grew to 1,392 passengers for the week. This service was provided with as many as 16 vehicles during peak periods for Monday through Friday service. Krapf Coaches established a paratransit system headquarters in a small commercial office building in the center of the county just outside Downingtown. The service began with three office staff including two call takers/dispatchers and one system manager. The president of Krapf Coaches provided overall system direction and oversight to the office manager.

By way of comparison, in May 1987 the CPS system provided about 995 passenger trips or boardings per day for over 19,905 boardings for the month. Consequently, in slightly less than three years the county systems ridership had grown by 284 percent from an average of 259 boardings per day in its first month of full county-wide operation. In addition to the natural growth and development of the system, however, the County and its private operator have been quite successful in expanding the ridership base beyond the senior citizens and medicaid clients that it started with. The system now earns operating revenue from six other sources besides the Pennsylvania lottery program. These various health and human service grant sources provide ridership for sheltered workshop attendees, partial hospitalization clients, and a variety of transportation for the mentally handicapped and developmentally disabled.

The system has also begun to attract some county residents who are not affiliated with a health or human service agency and who pay their own fare. In May 1987 for example, a total of 605 boardings were provided to such riders. Whereas in the beginning the system served almost entirely senior citizens, its ridership today is about 64 percent senior citizens, the balance being MH/MR and developmentally disabled clients, medicaid clients and the general public.

Funding

As indicated above, CPS does not use any UMTA funding to provide operating or capital financial assistance for the system. The choice to not use federal transit assistance was a definite and conscious decision by the Chester County Commissioners for the twofold reason of perceiving that the use of federal funds would result in a high degree of additional paper work, administrative requirements and regulations, and the general position that local government services should be operated without federal funding whenever possible.

When questioned about the possible future use of federal transit funds, both elected and government staff officials indicated that it would probably only be given serious consideration for a substantial expansion or county sponsored development of fixed route services. One of the elected officials also indicated that they would only consider using such funds if the "red tape" and regulations involved were minimal. At the same time, however, it was generally felt by all those interviewed that the County's continuing growth would require a continued increase in the amount of CPS service. The ability to do so, however, will depend upon the availability of additional lottery revenue funds and/or other non-UMTA sources.

FINANCIAL AND OPERATING DATA ANALYSIS

Since the CPS system began as a system totally operated by the private sector, a before and after comparison is not possible. Secondly, since CPS has only been fully operative county-wide since 1984 an internal time series time comparison of the system is also rather limited.

Table 3.1 displays a variety of base data, performance measures and funding source information for CPS. In addition to showing CPS's Fiscal Year 1986-87 data based on 11 months of operation annualized, comparable data for CPS is also shown for the 1984-85 fiscal year which was the first full year of county-wide service under CPS. Thus, the two fiscal year columns for CPS show changes that have resulted over a two year period. Figure 3.1 presents a comparison of the six performance indicators from Table 2.1.

The amount of service and coverage distances provided under CPS are substantially greater than what was done by human service agencies before CPS. The annual vehicle miles and vehicle hours of service provided by CPS in 1986-87 is about four times greater than the combined agency mileage in 1981-82. CPS provides a county-wide service to all areas and towns of the county plus out-of-county trips to the Philadelphia area and Wilmington, Delaware for medical purposes; whereas, the six agencies that previously operated services only served a limited number of destinations primarily their own facilities within certain parts of Chester County. Compared to the 1981-82 agency services the CPS system today carries about twice as many passengers daily and annually, but needs less than twice the vehicles to do so.

The two year trend between FY 1984 and FY 1986 for CPS shows a very favorable outcome with the cost per vehicle mile and the cost per passenger actually reducing as the system grows. Obviously the principle of economies of scale and the consolidation of more riders onto the same system have benefited CPS in this regard. In examining the funding sources for example, it can be seen that in addition to the lottery revenues growing substantially over the two-year period the funds for MH/MR passengers have shown the single most dramatic increase going from a total of $787 in the system's first full year to over $367,000 two years later. Also, the general public fares for non-sponsored riders have more than tripled in the two year period. The fare structure has not been increased during this time but the ridership has.

The efficiency indicators for CPS are also in a positive direction with passengers per vehicle hour increasing from 2.96 in 1984-85 to 3.29 in 1986-87. Similarly, the passengers carried per peak vehicle, per day have also increased. All this coupled with the increased general public ridership has resulted in an overall decline in the subsidy per passenger compared to the system's first year.

In summary, the financial and operating data for the CPS system shows quite favorable trends. This is a particularly important finding in light of the frequent contention that once private operators are contracted they will

Table 3.1
Comparative Financial and Operating Data

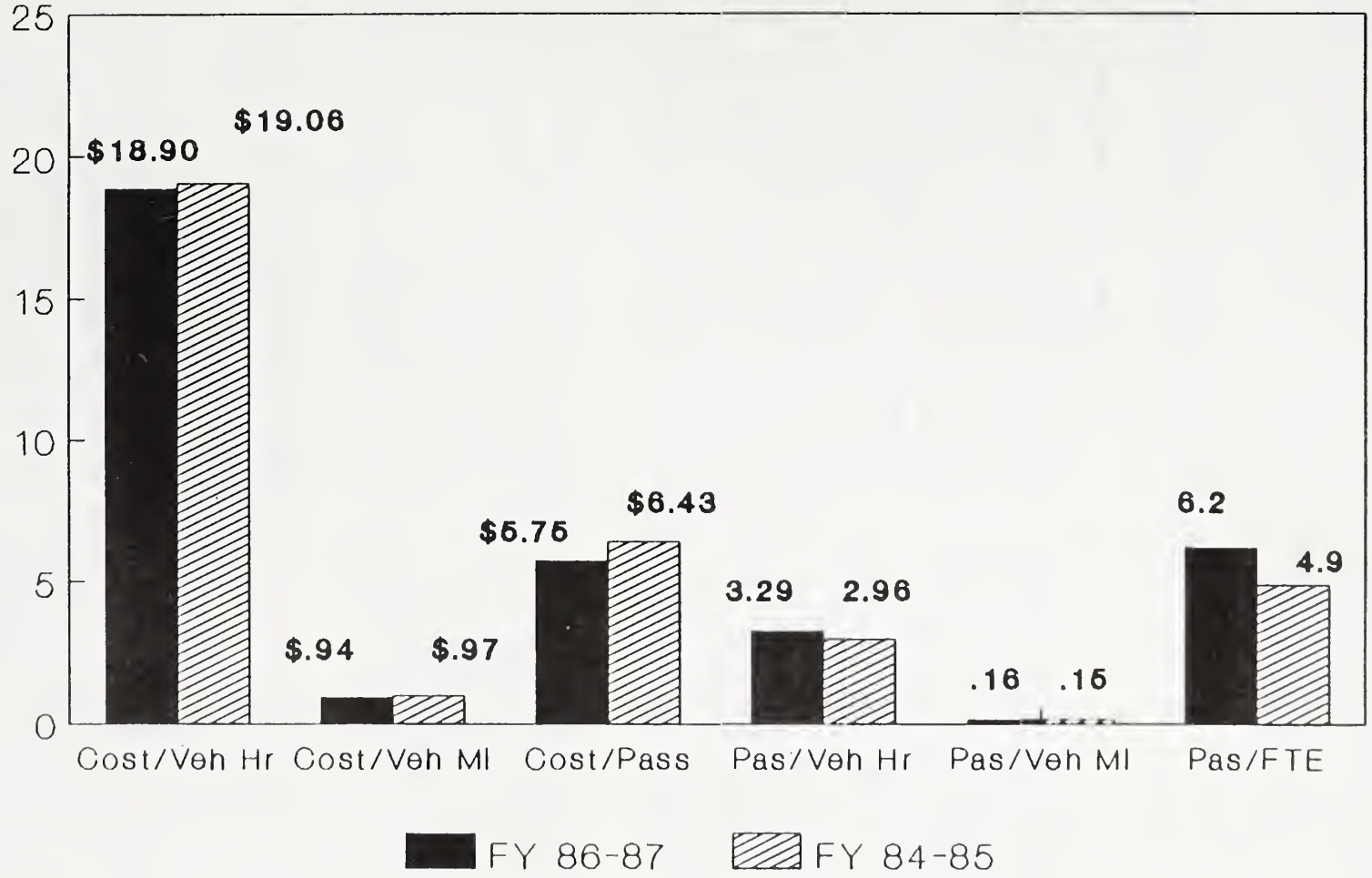
Item	CPS FY 86-87[1]	CPS FY 84-85
A. Base Data		
Passengers/Day	960	446
Passengers/Year	240,000	113,847
Peak Fleet	37	20
Operator Employees	36 FTE	21.5 FTE
Co. Admin. Employees	2.5 FTE	1.75 FTE
Annual Ops. Cost	$1,347,000	$708,016
Annual Co. Admin. Cost	$ 33,000	23,617
Annual Total Cost	$1,380,000	$731,633
Average Driver Wage	$ 6/hr.	$ 5/hr.
Annual Vehicle Miles	1,473,000	756,787
Annual Vehicle Hours	73,000	38,388
B. Performance Measures		
Cost/Vehicle Hour	$ 18.90	$ 19.06
Cost/Passenger	$ 5.75	$ 6.43
Passenger/Vehicle Hour	3.29	2.96
Passenger/Peak Vehicle/Day	26	22
Subsidy/Passenger	$ 5.66	$ 6.37
Passenger/Employee/Year	6,230	4,900
C. Funding Sources		
Pennsylvania Lottery	$ 709,000 (52)	$ 423,480 (58)
Older Americans Act	$ 163,000 (12)	$ 104,403 (14)
Title XX	$ 500 (.04)	$ 3,234 (.4)
MH/MR Sheltered Workshop	$ 250,500 (18)	0 (0)
MH/MR Providers	$ 117,000 (8)	$ 787 (.1)
Medicaid	$ 119,000 (8)	$ 193,813 (26)
General Public Fares	$ 21,000 (2)	$ 5,916 (.8)
United Way	$ 0 (0)	$ 0 (0)

Source: Chester County Office of Human Services and Krapf Coaches, Inc., July 1987.

[1]Annualized estimate based on 11 months data.

Figure 3.1

Chester County Performance Indicators



Passengers/FTE in thousands

Source: Chester County Office of Human Services and Krapf Coaches, Inc., July 1987.

just continue to increase the cost and inefficiency of their service. In Chester County at least with Krapf Coaches it appears that the opposite has been true. The $18.90 per vehicle hour cost for a large county-wide system using body-on-chassis mini buses is a very reasonable cost. Especially when considering that many other rural as well as urban systems frequently exceed $20 per vehicle hour.

OVERALL IMPACT AND CURRENT STATUS

Goals and Objectives Achievement

The April 1983 plan for shared ride demand responsive services, prepared for the Board of Commissioners of Chester County, specifies certain objectives of the County in deciding to develop such a system. These objectives which are contained in the original system plan were also stated at the outset of the planning effort as a means of guiding the development of a plan for county-wide demand response service: 1) developing public transportation for rural area residents that currently have no service; 2) providing a centralized or coordinated transportation system that could also meet the needs of many of the county's health and human service agencies which have traditionally operated their own independent services; and, 3) attempt to maximize utilization of the County's private-for-profit transportation companies. The plan further went on to state that "the proposed system is intended to be the nucleus of a county-wide demand response paratransit service which will hopefully be attractive and economical for other agencies and the general public."

The plan was developed pursuant to Pennsylvania Act 101-Section 406(3)(II)-Public Law 427. This act provided funds for the planning and development of shared ride demand response transportation systems for persons 65 and over. The act required that the County also make the service available to the general public, although persons 65 and over were to be the primary beneficiaries of service and although lottery funds cannot be used to subsidize non-seniors. Consequently the system has a strong emphasis on seniors and is not equally supportive of the general public.

The recommended service plan that was adopted by the County called for starting service on an experimental basis in the northern and southern sections of the County leaving the more populous central section of the County unserved until such time that the concept proved itself in the other two areas. In developing the plan a Study Steering Committee that was headed by one of the three County Commissioners included various county government department heads, representatives of private transportation companies and human service agencies. Through this involvement of a variety of influential persons one of the other objectives of the plan which was strongly supported was to convince agencies operating independent transportation to abandon those services in favor of using a single centralized countywide system. The influence of these officials in making this a

success is evidenced by the number of agencies now using CPS. Moreover, the desire to serve the general public (persons who are not sponsored by a human service agency) has also succeeded and is evidenced by the systems' financial and operating data comparisons which have been growing. Due to funding restrictions, however, this growth is limited.

In August 1984, the system's second full month of countywide service, fare paying general public ridership accounted for only .04 percent of the total system ridership. By February of 1987, about two-and-a-half years later the system's general public ridership accounted for 3 percent of the total ridership. As of this writing the system has been operating on a countywide basis for a full three years and has certainly achieved the stated objectives established for the service at the beginning of the county's planning study.

With respect to public subsidy and cost savings, the system continues to operate without any UMTA transit operating assistance. The county has no plans at this time to utilize such funds in the near future. This is not to say however, that attitudes could not change and that if such funds were available under the kinds of circumstances desired by the county, that they may not pursue those funds.

The fact that over a three year period the system has experienced a decrease in the cost per vehicle hour and a decrease in the cost per passenger along with service efficiency increases such as passengers per vehicle hour, passengers per peak vehicle per day, and passengers per employee, certainly speaks well for the system's future. The fact that subsidy per passenger has also decreased attests to the success of the system in achieving some of the ideals that are so frequently stated for coordinated or consolidated systems.

The fact that the county has developed such confidence in its private contract operator, and that it has designated that operator to serve in its behalf as the coordinator of all paratransit services in the county, also speaks highly for the success of the CPS system. Under this new designation Krapf Coaches will have the responsibility of subcontracting with all other paratransit services in the county that will continue to operate under the Pennsylvania lottery assistance program. At present this involves two taxi companies and two small non-profit transport providers in the eastern-most urbanized area of the county. It appears that both the private operator and the county agree on the desirability of continuing to involve these other operators to provide the consumer with a choice, and a variety of transportation services depending on the area in which they live.

At the same time, however, the county and coordinator have also agreed that a single central dispatching system will be managed by the coordinator through which all subcontract operators will receive the service request. The success of this central dispatching system operated by a private operator intending to serve other private operators as well, is perhaps one of the most significant challenges facing the system today. If this concept succeeds and other operators continue to work cooperatively with

the new county coordinator, Chester County will probably have achieved an unprecedented high level of both privatization and coordination that is simply not common in the United States.

Public and Private Sector Relations and Satisfaction

A number of interviews were held with county staff and elected officials, the director of one of the major human service agencies in the county that uses CPS, and the private contract operator. From all corners, the relationship between the public and private sector in Chester County appears to be quite positive. As discussed earlier, Chester County is perhaps more favorably disposed to utilizing the private sector to provide public services than most counties in the United States. Chester County's Board of Commissioners and government staff have long been interested in the concept of privatization before UMTA emphasis on using the private sector materialized over the past few years. Both elected officials and agency directors are quite satisfied with the quality and quantity of service provided under the CPS system. The private operator has benefited by capitalizing on the opportunity to expand and diversify their transportation company. The fact that the county is willing to turn over the coordination responsibility to the private operator and to authorize the operator to establish a single centralized dispatch system for the county is perhaps the most conclusive evidence of the sound relationship and mutual trust that have been developed between county government and the private operator.

CPS has by no means solved all of the transportation needs of Chester County, and as a door-to-door demand responsive system could never be expected to do so. Regularly scheduled work trip transportation in a growing county such as Chester would need commuter van pools and fixed route services to satisfy those needs. Consequently, it appears that Chester County, perhaps currently and at least in the near future, may be faced with significant decisions regarding whether or not to expand into fixed route service through SEPTA or CPS. Such pressures could obviously cause the county to more seriously consider applying for federal transit operating assistance. All of the elected officials, government staff, and private operators, when questioned about the prospect of Chester County ever using UMTA transit assistance, indicated that it "may be considered" and all seemed to agree that it could become a reality if growth pressures forced the county to develop its own fixed route service over and above what SEPTA is willing or able to provide.

When questioned about the future stability of CPS, should state lottery and/or federal human service transportation funds be reduced substantially or even eliminated, most all respondents indicated that they felt the county would continue to provide service but that cutbacks and reductions would be made. If all non-local funding support was eliminated about half of the respondents felt that the system might be totally eliminated and the others felt that the county may still try to provide some minimal level of service. Generally, the attitude seemed to be that CPS had become identified

as a useful specialized public transportation service and that constituents would advocate that the system continue even in the face of budget reductions.

The county has intentionally promoted and publicized the CPS system only to a limited degree. The county tends to feel that substantial latent demand exists which simply may not be able to be satisfied given existing budget and resource limitations. Consequently, although the general public fare paying ridership has grown in CPS's three years of existence, its full potential has not yet been fully tested.

TRANSFER POTENTIALS

In the case of Chester County there appear to be five factors which stand out above all others as being critical determinants of success. They include: 1) the personal interest of County Commissioners in developing transportation; 2) the availability of financial assistance from the State of Pennsylvania; 3) the pro business orientation of Chester County government; 4) the availability of a sizable, successful and well respected transportation company within the county; and, 5) the interest of the president of that transportation company in expanding and diversifying into government sponsored paratransit. The first two factors are probably essential to even having a local system. The other three factors are probably critical to achieving the type of privately operated service that has been widely supported and accepted in Chester County. The county's desire to have a single private company operating a centralized transportation service in a large county like Chester, probably requires the presence of a sizable, successful and willing transportation company. None of these factors are unique in and of themselves, but having all five in combination with one another in a single environment is less probable.

In addition to the conditions and factors mentioned above, another important ingredient in the Chester County system was the use of a diverse Study Advisory Committee during the planning stages. Key actors from all sectors in the county, including all private transportation companies, were involved. Consequently, the planning project had the benefit of being closely attuned to the attitudes, positions and preferences of local officials, government staff, agency heads and transportation operators. Additionally, the regulations governing the state's lottery revenue program required counties to consider the use of the private sector. Although Chester County would have utilized the private sector anyway there are probably many other counties and transportation authorities throughout Pennsylvania that would have avoided transportation companies if there had not been such a requirement. Finally, it must also be noted that Pennsylvania has a long-standing history with public transportation services being provided by

private companies. There are over 180 intercity bus companies headquartered in Pennsylvania. School bus operations have always been operated by the private sector and taxi companies are prevalent even in the very rural areas. Many states such as in the southeast and the far southwest, especially those with large rural areas, simply do not have many choices when it comes to private transportation companies.

In a case in which the local government desires to have a single centralized private company controlling the total system, as is the case of Chester County, the prevalence of large successful and well-respected operators is probably an important factor. Many companies, as noted in Chester County's planning efforts and bidding procedures, simply do not have the size nor capability to handle a county-wide operation.

One of the difficulties in Chester County as compared to most counties in the United States is the fact that it has multiple trade and service centers with 16 town centers scattered throughout the county and no single major trade center. Consequently, the cost and cost-efficiencies associated with travel in such a county are not as favorable as they might be under a more normal situation where there is a single trade center or county seat to which most paratransit riders travel. When this is the case the system needs to have substantial vehicle resources to provide widespread coverage.

An optional approach which has been used in other locations may be to use multiple operators, each serving designated subareas of the county. The efficiency of centralized control and central dispatching and avoiding duplication of resources, however, is lost in this approach.

The prospect for a long-term contractual relationship, such as is the case in Chester County, is definitely a big plus for the private sector. This gives the private operator and the government a sense of mutual trust and gives the private operator some security and ability to take risks to make capital purchases and system expansion that might not otherwise be taken. Assisting the private operator with capital purchases when government funds are available can also be beneficial. While Krapf Coaches utilizes its own facility and many of its own vehicles, a dedicated fleet has been purchased over the years for use as the County paratransit system. The most obvious benefit is that it helps hold down the cost that would otherwise have to be passed on to the local government.

Perhaps one of the most interesting findings from the Chester County experience is yet to come during 1987-88 when Krapf Coaches is proposed to assume the government role of coordinator. It is the County's desire to minimize its role and involvement in overseeing and managing transportation. Chester County's ultimate goal would be to have the private sector be totally responsible for all coordination, management and operations with the county only involved in setting policy. In this regard, Chester County may represent one of the most far-reaching examples of transportation privatization to occur recently in the United States.

CHICAGO TRANSIT AUTHORITY'S HYBRID USER-SIDE SUBSIDY PROGRAM

CHICAGO, ILLINOIS

CHICAGO TRANSIT AUTHORITY'S HYBRID USER-SIDE SUBSIDY PROGRAM
Chicago, Illinois

INTRODUCTION AND HISTORY

Chicago is located in northeastern Illinois on the western shore of Lake Michigan. The area including the City of Chicago and the suburban communities of Cicero, Berwyn, Oak Park, Forest Park, River Forest, Elmwood Park and River Grove make up an area of 252 square miles with a population of approximately 3.3 million persons. It is estimated that there are some 113,000 people who have some mobility limitations due to disabilities. According to 1980 Census figures, 110,500 persons have disabilities which made the use of public transportation difficult or impossible.

In 1981 the Chicago Transit Authority (CTA) began a special paratransit service for the disabled. The service was provided in-house using CTA union drivers, 40 lift-equipped, small buses, support staff and a separate facility. Each trip provided by this service cost the CTA $28.61 which was expensive. In 1983, CTA commissioned a comprehensive study of the operation to identify ways to increase its efficiency and effectiveness and to study the feasibility of providing the service with private sector contractors in both the City and its immediate surburbs.

Study results identified several problems and suggested extensive modifications. Important findings of the study indicated that: 1) Many improvements were warranted in operations and monitoring; 2) CTA was one of the few large transit systems operating special services in-house; 3) Estimated demand for the service far exceeded the supply; 4) Per trip cost ($28.61) for the CTA service was the highest of the eleven services examined by the study; and 5) Using private contractors to provide the service was both feasible and desirable. CTA staff estimated that using contractors would enable the Authority to double available service with no increase in budget. The CTA service model is a hybrid in that it captures what CTA staff felt were the best components of three existing approaches: 1) Milwaukee's User-Side Subsidy Program; 2) Pittsburgh's Access, a brokerage program; and 3) Philadelphia's paratransit program which uses centralized dispatching.

All of these approaches make extensive use of the private sector; Pittsburgh's Access even uses a private contractor to administer and manage the system. The CTA program for special services was aided by on-site assistance from these three systems by arrangement through UMTA's Public

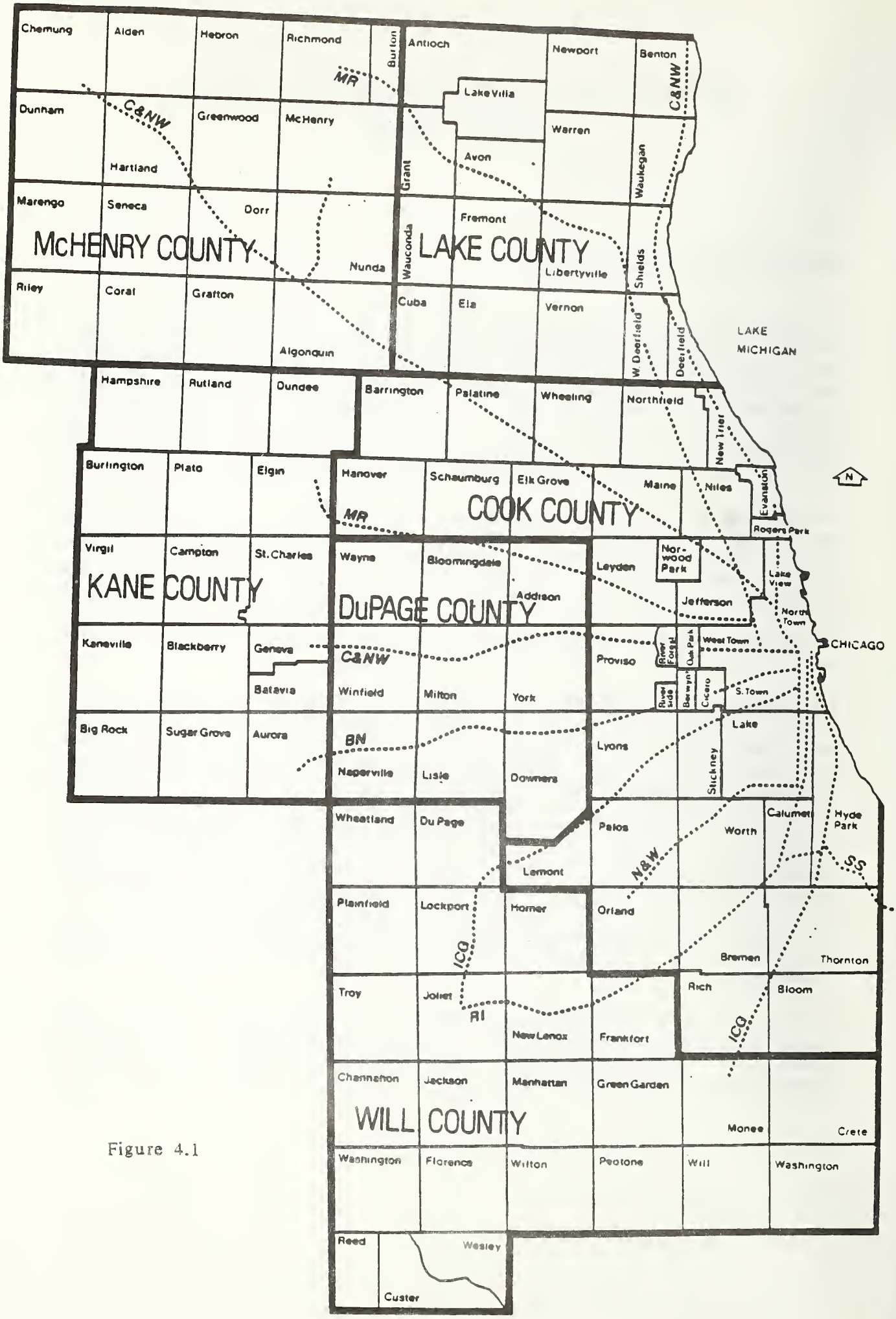

Chemung
Alden
Hebron
Richmond
Burton
Antioch
Newport
Benton
MR
C&NW
Lake Villa
Dunham
Greenwood
McHenry
Warren
Hartland
Avon
Grant
Waukegan
Marengo
Seneca
Dorr
Fremont
McHENRY COUNTY
LAKE COUNTY
Wauconda
Shields
Nunda
Libertyville
Riley
Coral
Grafton
Cuba
Ela
Vernon
W. Deerfield
Deerfield
Algonquin
LAKE MICHIGAN
Hampshire
Rutland
Dundee
Barrington
Palatine
Wheeling
Northfield
New Trier
Burlington
Plato
Elgin
Hanover
Schaumburg
Elk Grove
Maine
Niles
Evanston
N
COOK COUNTY
Rogers Park
Virgil
Campton
St. Charles
Wayne
Bloomingdale
Leyden
Nor-wood Park
Lake View
KANE COUNTY
DuPAGE COUNTY
Addison
Jefferson
North Town
Kaneville
Blackberry
Geneva
River Forest
Oak Park
West Town
CHICAGO
Proviso
Batavia
Winfield
Milton
York
River Side
Berwyn
Cicero
S. Town
Big Rock
Sugar Grove
Aurora
BN
Lake
Lyons
Naperville
Lisle
Downers
Stickney
Wheatland
Du Page
Palos
Worth
Calumet
Hyde Park
Lemont
N&W
SS
Plainfield
Lockport
Homer
Orland
ICG
Bremen
Thornton
Troy
Joliet
RI
Rich
Bloom
New Lenox
Frankfort
ICG
Channahon
Jackson
Manhattan
Green Garden
WILL COUNTY
Monee
Crete
Washington
Florence
Wilton
Peotone
Will
Washington
Reed
Wesley
Custer

Figure 4.1

Transportation Network. CTA staff also received input from the local Advisory Committee on Services for the Disabled.

Service for the CTA program is provided by four contractors who were selected through a competitive bid process. The four contractors and their initial prices are as follows:

	CHARGE PER TRIP		
	Ambulatory	**Non-Ambulatory**	**Late Evening**
Art's Transportation	$12.50	$14.75	
Cook-Dupage Trans.	12.00	14.50	
Stewart Bus Co.	13.70	13.70	$13.80
Transit Service Corp.	11.00	15.50	

The CTA asked for statements of qualifications to be submitted by each bidder. The statements submitted by 13 firms asked for the following information:

- Ownership of firm
- Type of service operated
- Service areas
- Agency contracts and costs
- Capacity and fleet management capabilities
- Radio and dispatching capabilities
- Proof of insurability to CTA specifications
- Proof of bondability ($50,000 performance bond)
- Description of major physical facilities
- Willingness to comply with equal opportunity and fair employment practices
- Ability and willingness to meet disadvantaged business enterprise goals

Those contractors which satisfied the first level of requirements were given personal interviews by CTA staff. The interviews were designed to determine the following:

- Mass transportation experience
- Paratransit experience involving disabled persons
- Management background and experience
- Understanding of proposed service
- Dispatching/scheduling capabilities
- Communications equipment
- Maintenance background and experience
- Ability to maintain leased vehicles
- Personnel practices
- Firmness of commitment
- Location and number of operational facilities

Of the nine contractors who submitted price proposals, six were asked for a "best and final" price. As a result of this process, the four contractors listed above were selected.

Initially, service was scheduled to start in mid August, 1985. In July the ATU, Local 241 filed for a restraint to prevent the CTA from providing paratransit service with contract carriers. The case went to arbitration and at the end of August the Arbitrator ruled in favor of CTA. This delayed the start of service until November.

After a transition period of three weeks, full service for approximately 6,700 certified riders began on October 20, 1985.

CTA's User-Side Subsidy Program has several key elements which contribute to its success. These elements are:

1. The program operates in a competitive environment with the four contractors competing on a citywide scale with no guaranteed patronage. While trip trading is permitted (with rider permission), riders are essentially free to choose any carrier. Fares are the same across all carriers ($0.90).

2. Billing is done on a cost per trip basis which encourages operators to group trips whenever possible resulting in increased efficiencies. Trips by ambulatory passengers are subsidized at a lower rate than for non-ambulatory riders. This method of billing also allows operators to mix CTA and other riders to increase productivity.

3. Requests for service are made directly with the operators.

4. A centralized computer reservation and billing system keeps records for over 14,000 certified users. CTA provides operators with computer terminals and printers since they must make trip reservations through the computer permitting the CTA to closely monitor service demands.

5. User complaints can be made directly to the CTA, not the contractor.

6. Contractors must adhere to CTA's hiring and training requirements which were adapted from procedures used for the Authority's regular bus drivers.

7. All vehicles used by contractors to provide the special service are inspected before being put into service. The Authority initially leased 20 lift-equipped buses to contractors for $1 a year. These were maintained by the operator. Approximately 130 vehicles are used to provide the service.

8. Trips are recorded by using a computer generated **dispatch ticket**: both driver and rider sign a **trip ticket** at trips end and the two are matched by computer. This allows the Authority to monitor demand and market share and is used for billing, complaint investigation, and planning purposes.

FINANCIAL AND OPERATING DATA ANALYSIS

The CTA User-Side Subsidy Program is totally funded by State and local sources. The breakdown of funding is as follows:

51%	Farebox revenues from overall CTA operations
49%	Regional Transit Authority local tax revenues

However, the overall CTA budget uses about eight percent UMTA funding so the special program is indirectly supported with UMTA dollars to a small degree.

CTA Special Services Program Before and After Contracting

CTA's decision to use the private sector to provide paratransit services to the disabled was based on the following reasons:

- The original program (before privatization) could not meet demand and Federal procurement policies were time-consuming and costly
- CTA's cost of providing the service was very high
- Use of the private sector was thought to be less expensive
- The private sector could provide the service more effectively and efficiently

The comparison in this section is based on summary information for the Transit Authority operated service and on information, provided by the Authority, for the period April 1986 to March 1987 for the user-side subsidy service. Unless otherwise noted, all passenger-related information is based on figures that do not include trips by attendants. In some cases, information is not available for the CTA operated service.

Ridership--The CTA-operated special service carried approximately 12,500 passengers per month. Under the CTA contracting operation, 67,000 passenger trips were made in March 1987. This represents an increase of over 400 percent -- an impressive increase by almost any standard.

As can be seen from examination of Figure 4.2, ridership on the CTA-contracted special service has increased steadily from April 1986 through March 1987. Between April 1986 and March 1987, ridership increased 85 percent. Likewise, the relative distribution of patronage among ambulatory and non-ambulatory uses has also changed. Figure 4.3 shows that the proportion of both types of riders was similar in April 1986 -- 53 percent ambulatory and 47 percent non-ambulatory riders. These relative proportions widened by March 1987 with ambulatory passengers accounting for 62 percent and non-ambulatory 38 percent of ridership.

Initially, all contractors began operations with approximately equal market share. Since the beginning of the program, however, market share has changed substantially. Figure 4.4 shows the average market share of contractors over the period from April 1986 through March 1987. There is little doubt that this shift was produced by market forces such as quality of service and consumer preferences.

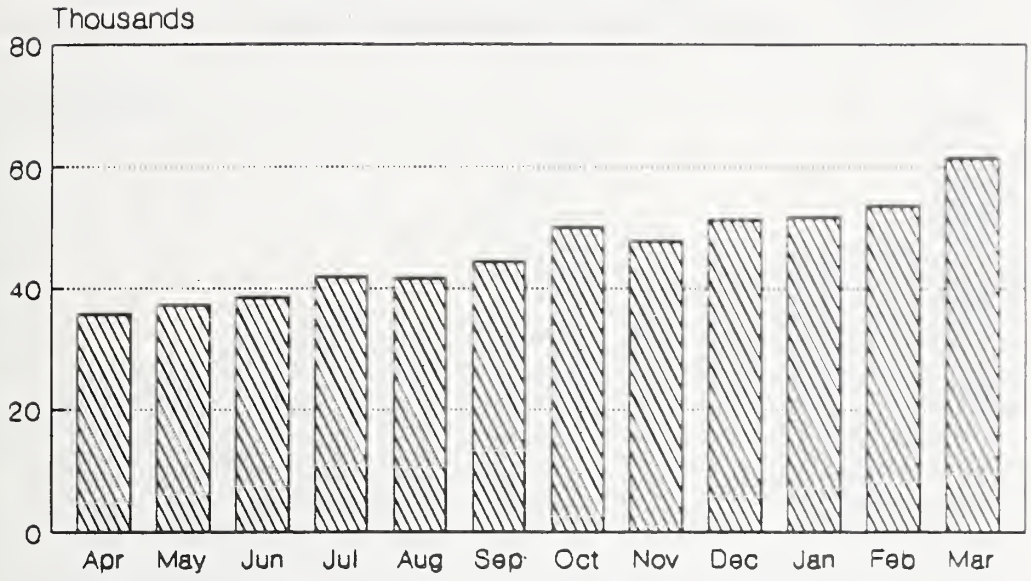
Transit users are probably most sensitive to wait time; as the wait time of one service increases relative to other services there will be a corresponding shift to the higher quality services. Apparently this is the case among the four service operators as evidenced by the graph in Figure 4.5. There is a strong inverse relationship between market share and a carrier's percentage of trips that are over one hour late.

Vehicles--Under the CTA-operated program 40 buses were available (20 Carpenter and 20 Superior buses) for service and approximately 33 were used on a regular basis. Under the new program, 185 vehicles are approved for the service and approximately 130 are in peak service. CTA leases 20 lift-equipped buses to contractors for $1.00 per year with maintenance being the responsibility of the operator. These buses were returned to the Authority in the summer of 1986. Other vehicles used are Sedans, Dodge Caravans retrofitted with ramps or small lift-equipped buses.

Service Hours--The CTA-operated service operated from 6:00 AM - 10:00 PM on weekdays and from 8:00 AM - 5:00 PM on Saturday, Sunday and holidays. The new service operates from 5:00 AM to 1:00 PM every day. On a weekday basis this represents an increase of over 1,000 service hours per year.

Revenue Miles--In 1985 the CTA-operated program had 745,000 miles of service for a 10-month period or approximately 74,500 miles per month. In 1986 (Jan. - Dec.) the new service provided 4.2 million vehicle miles of service or approximately 350,000 miles per month. From April 1986 to March 1987 monthly mileage increased 76 percent. As shown in Figure 4.6 monthly vehicle miles increased steadily with the exception of seasonal effects in August and December.

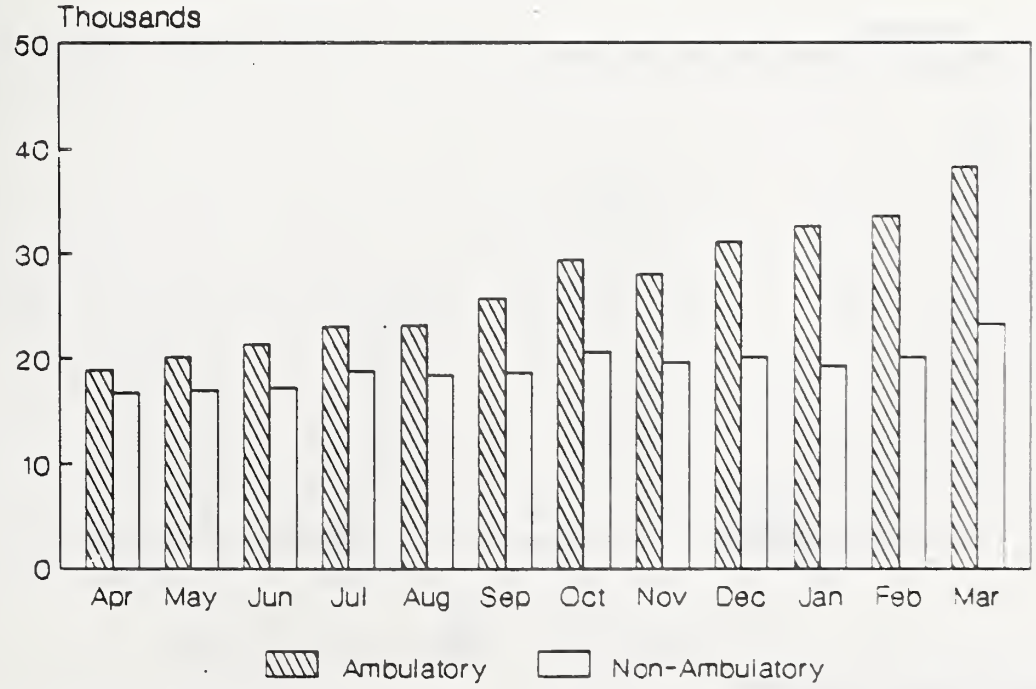
Figure 4.2
Ridership on CTA's
Hybrid User-Side Subsidy Program



Does not include attendants.
From April 1986 through March 1987

Source: Chicago Transit Authority, June 1987.

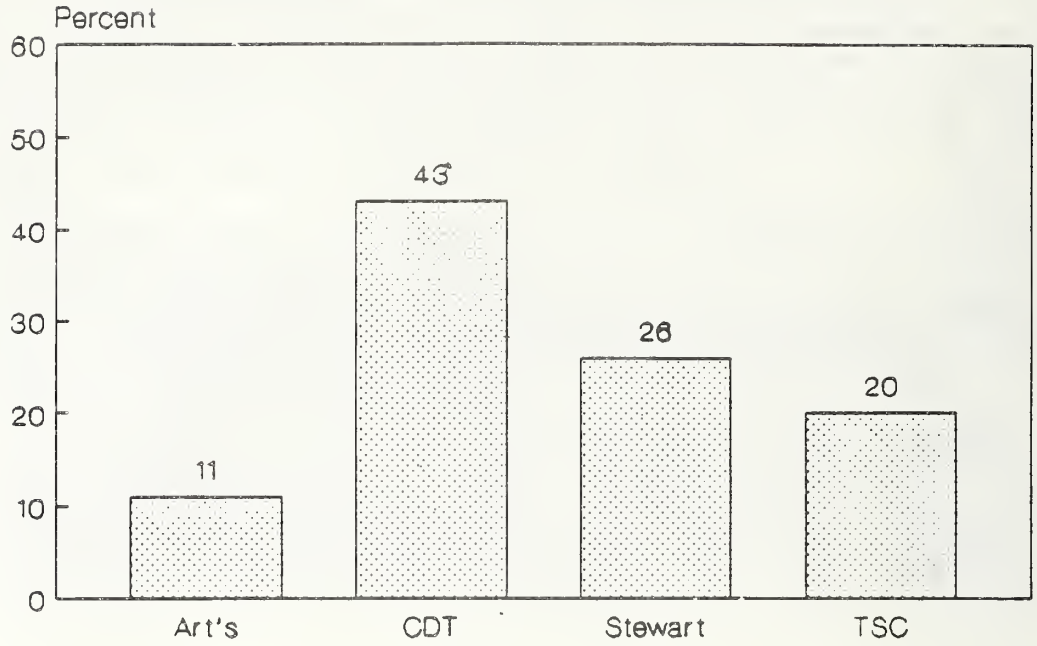
Figure 4.3
Monthly Trip Types



Does not include attendants.
From April 1986 through March 1987

Source: Chicago Transit Authority, June 1987.

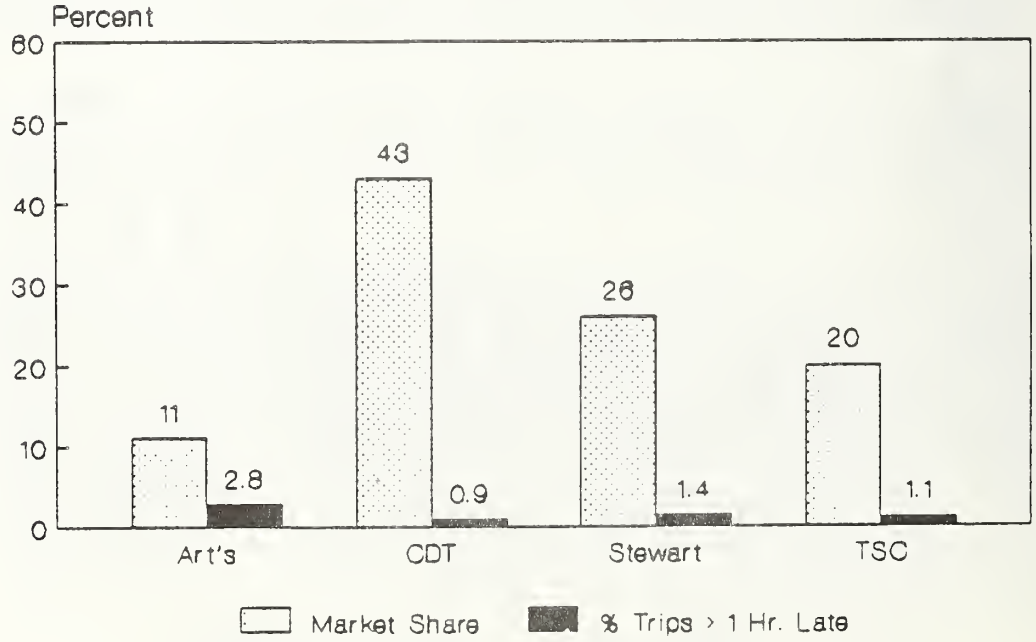
Figure 4.4
Private Provider Market Share



Based on data from April 1986 - March 1987

Source: Chicago Transit Authority, June 1987.

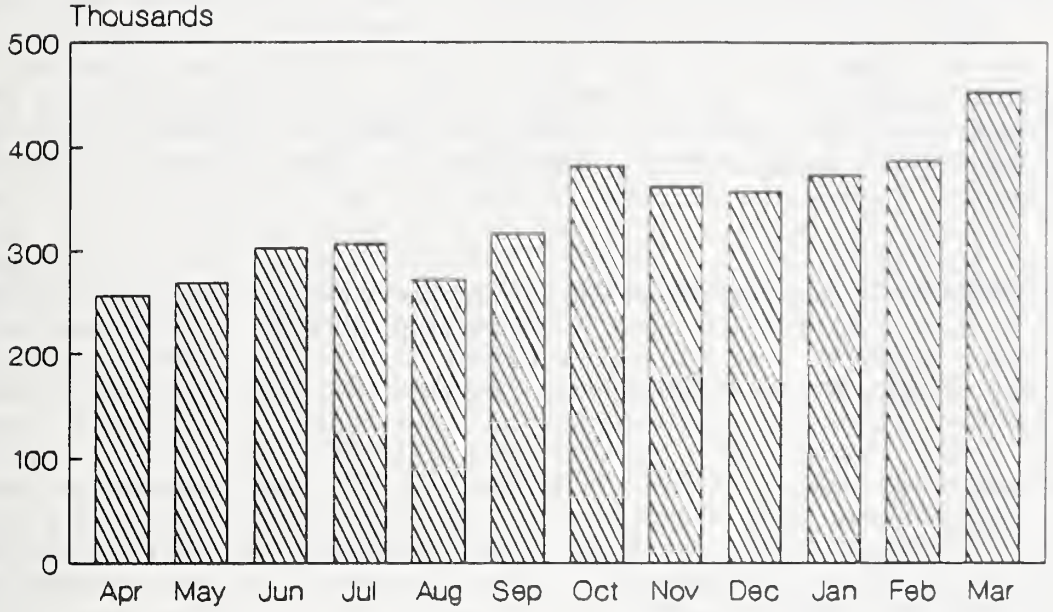
Figure 4.5
Private Provider Market Share and On-Time Performance



Averages based on data from
April 1986 - March 1987

Source: Chicago Transit Authority, June 1987.

Figure 4.6
Monthly Vehicle Miles
CTA's User-Side Subsidy Program



Based on data from April '86 - March '87

Source: Chicago Transit Authority, June 1987.

Cost Per Vehicle Mile--According to UMTA Section 15 reports, the cost per vehicle mile of the CTA-operated service was approximately $1.60. For the new service the cost is $1.81 per vehicle mile.

Passenger Trip Cost--The per trip cost of the CTA-operated service was high -- over $28.00. The new service cut this cost by more than half.

The per trip cost for the user-side subsidy service has fallen since the beginning. In March 1986 the average cost of a one-way trip was $12.57. By March 1987 the average trip cost had fallen to $12.41. Much of this decrease can be attributed to the increase in the number of ambulatory riders.

Trip Length--Trip lengths on the CTA-operated service were 8.6 miles. For the user-side service, the average trip length is 6.5 miles and has remained consistent over the study period (April 1986 - March 1987). This decrease in trip length reflects more discretionary trip-making by riders.

Passengers Per Mile - Under CTA-operated service, passengers per mile was approximately 0.09 (Section 15). By comparison, the value for the user-side subsidy program is 0.14 for CTA clients. The passengers per mile ratio is probably higher for the operators since they have the ability to mix clients from other programs.

Subsidy Per Passenger--Under the old CTA operation the estimated subsidy per passenger was approximately $27.00. The comparable figure for the user-side subsidy program is approximately $11.60.

Farebox Recovery--Given fares of $0.90 it is not surprising that the farebox recovery for the user-side subsidy program is seven percent. The CTA-operated system had a farebox recovery of approximately three percent.

By almost any standards the CTA User-Side Subsidy Program is exceedingly successful, especially in reducing costs. It is a clear and persuasive example of using the private sector to reduce costs while maintaining high levels of service in a large urban and suburban area. In many ways the new service is better for the consumer-choice of carrier now exists, service hours have been extended and many of the operational problems of the old system have been addressed.

OVERALL IMPACT AND CURRENT STATUS

Originally, the goals of the subsidy program were simply to: a) Reduce costs; and b) Improve service quality. There is little doubt that these goals have been met. In fact, CTA staff are so pleased with the program that they are currently negotiating with their collective bargaining units to allow even more contracting with private operators for service.

The cost savings resulting from the new service is extraordinary. Despite an increase in budget over the old program, service is more reliable and there is much more of it available to consumers. The public subsidy cost of the service could be reduced with an increase in fares; current fares for the special program are the same as those for regular bus service--$0.90. The special program provides a premium service but is not priced accordingly. However, a fare increase for this service would be met with considerable political resistence.

The ultimate test of any service is customer satisfaction. Generally, users appear to be pleased with the new service. Complaints average around one per 1,000 trips made and this number has remained stable since the start of the program.

No program of this magnitude, involving four major contractors, could be successful without good cooperation and communication between the public and private sector. At the start of the program, CTA held weekly meetings with the contractors, thereby establishing an early communication network. While weekly meetings are no longer held, the communications network continues to function.

TRANSFER POTENTIALS

The CTA User-Side Subsidy Program has considerable transfer potential to other large urban and suburban areas. Some of the features of the Program are transferrable to rural areas as well. However, direct transfer to small town or rural areas would be difficult because it is unlikely that such areas would have access to a sufficient number of contractors to make operation of the service competitive.

In the planning of the service, the CTA staff had the foresight to obtain technical assistance from three other major paratransit programs. What they learned from this experience showed up in the program design. Elements of these three programs that CTA staff felt would work in their environment were transferred, others were not. The final result was a hybrid program which captured most of the exemplary elements of the other programs while adding a few of its own.

The major advantages and disadvantages of the CTA User-Side Subsidy Program are:

Advantages

- The program gives consumers a choice among transit carriers.
- Administration of the program is relatively straightforward.
- Contractors are freed from keeping detailed records of trips allowing them to devote their energies to operations.
- Call intake, scheduling and dispatching are retained by the operators, giving them flexibility over grouping trips.
- A centralized computer reservation and billing system provides the CTA with the ability to monitor the program effectively.
- CTA has established sound policies regarding complaints, selection of carriers, driver hiring and training, vehicle inspection and auditing of trip tickets.
- A spirit of cooperation exists between CTA and the contractor.

Disadvantages

- The program relies on four carriers, limiting competition somewhat. There is a trade-off here between number of carriers and administrative simplicity.
- Even with monitoring, programs of this type tend to grow rapidly, pushed by consumer demand. There doesn't appear to be any policy or built-in mechanism which limits growth.

In the Chicago case, the following six factors were critical to the success of the program: 1) A source of funding which allows initial program growth to occur; 2) A process for screening bidders to determine whether they can provide the proposed service in a competent an professional manner; 3) A desire to reduce costs substantially while concomitantly maintaining a high level of service; 4) Establishing a sound communication network between administrative staff and operators; 5) A monitoring program which reduces the recordkeeping burden of operators yet allows program administrators to monitor operations; and 6) Procedures governing driver selection and training, vehicle inspection, and performance measures assuring that service quality remains high.

HAWAII COUNTY TRANSIT SYSTEM

HILO, HAWAII

HAWAII COUNTY TRANSIT SYSTEM
Hilo, Hawaii

INTRODUCTION AND HISTORY

The Hawaii County Mass Transportation Agency is a countywide public fixed route and demand response system that is totally operated by a combination of private-for-profit and private non-profit entities and is administered by the County Mass Transportation Agency. A service productivity plan implemented since December, 1985 has produced real savings and greatly improved productivity.

Since the system's beginning in 1975, it has relied upon funding from County Government, fares and UMTA. Between 1975 and 1977, a private contractor provided the drivers' insurance and maintenance services for the fixed route delivery system for the island. Beginning in 1978, the County assumed responsibility for maintenance of the vehicles and continues that responsibility today.

A cost reduction and productivity improvement plan was initiated in December, 1985. Since that time, operating costs have been reduced by more than $300,000 and the count of passengers per hour has increased by 17.08 percent. The most recent bid for contractual services for the fixed route system in December 1986 included 12,000 operating hours and the regular operation of 18 vehicles.

The fixed route service is provided by a single private provider, and the paratransit service is provided by two non-profit providers, the Hawaii County Economic Opportunity Council and the Hawaii County Elderly Activity Division. These two paratransit agencies provide a coordinated service delivery system which provides transportation services to the general public, elderly, handicapped and low income agency clients.

In the last two years, the island has experienced major economic problems due to changes in its agricultural economy. This has required the transit system to tighten its belt and seek ways to reduce cost. After its evaluation of existing services, the County chose to reduce operating miles and hours in order to save money. These reductions have resulted in a much more productive system.

The Hawaii County Transit Program provides transportation services for all of Hawaii Island, also known as the Big Island. It is the largest island in the State of Hawaii and in fact, is larger than all of the other seven islands put together. The County consists of approximately 4,000 square miles (close to Los Angeles County in size) with major geographic barriers

consisting of two major mountains reaching heights in excess of 13,600 feet above sea level. The result of this topography requires that the transit system follow the coastline of the County and only cross the island near its north end between the Kohala Mountains and the Mauna Kea, the island's highest mountain.

In 1986, Hawaii County received approximately $122,500 in Federal funds to assist in operating transit services. This amount of money accounts for only 17.2 percent of the total revenues of the Hawaii County Mass Transportation Agency. In comparison, farebox revenue accounts for 32.8 percent and County subsidy provides 46.4 percent. The remaining 2.4 percent is obtained through service fees for paratransit services for the elderly and recreation programs.

On the expenditure side, the County expends 59.8 percent of its revenue for contractual services, 17.5 percent for administration and planning, 0.4 percent for insurance, 6.8 percent for fuel, lubricants, and tires, and 15.5 percent for equipment maintenance and maintenance staff.

Hawaii County, as previously mentioned, is the largest county in the State of Hawaii and accounts for more than 50 percent of the square miles for the whole state. The County's 4,000 square miles has a residential population of 120,000 people. Of course, this population changes rapidly depending upon the tourist population at any given time of the year, however, the transit system is not oriented to serve tourists. The County's population concentrations are the City of Hilo and the Towns of Honoka'a, Waimea, Hawi and Kailua. Population densities adequate to support transportation services can be found in the Hilo area and along the island's major highways around the coastal areas of the entire County.

A circumferential route that would cover a major part of the island's coastal area would cover 217 miles. Two additional extensions to that route, one of 73 miles, would provide coverage to most of the remaining portions of the north and Kohala coastal areas; and a second of 25 miles providing service to the eastern tip of the island known as the Puna area.

It should be noted that driving speeds along these routes are slow due to the terrain and quality of highways. There are very few areas in which maximum speeds can be obtained for more than very limited periods of time. The combination of mileage and slow speeds, and the numerous stops required to serve the Island's residents results in very long time and mileage. Therefore, the route structure for Hawaii County, once leaving the Hilo area is limited to one or two scheduled trips per day.

Property values on the Island of Hawaii have been increasing at a rate of two to three percent and development is basically at a stand-still with the exception of the west side of the island. The island is anticipating major growth, but such growth has yet to materialize.

A major transportation problem of the island is the development potential of the west side of the island and a population that resides on the east

side of the island. This separation of population from development area will clearly result in the need for a transportation system to provide work trips from the east side of the island to the west and return. The County is planning for this need and the financial pressures to provide new transit service.

The County considers the use of the private sector as a method for stimulating the island's economy and also appreciates the flexible nature of privately-operated companies. Such flexibility will be indispensible in meeting the needs of the future.

The County has three major objectives associated with its public transportation system.

1. To provide linkages for County residents between residence, work, retail trade, recreation and County services;

2. Energy conservation; and

3. Mobility for the economically disadvantaged.

Service Description

In 1986 the County transportation system adjusted its service delivery system to eliminate the duplication of services with the human service agencies on the island. A major effort was made to consolidate human service transportation delivery systems with the general public systems. A choice was made to add the general public Dial-a-Ride patrons to the human service network, therefore eliminating a separate general public transportation system for three areas of the County. Currently, the Dial-a-Ride services are provided by the County's Elderly Activities Division for the Hilo and Kona area, and by the Hawaii County Economic Opportunity Council for the South Puna area.

Hawaii County transportation system, as stated earlier, began in 1975 with the purchase of 15 buses (ten 42-passenger and five 25-passenger). From the very beginning, transportation services were provided through contracts with the private sector with the County providing the equipment. In 1978, the County assumed the maintenance of all of its equipment including the the provision of fuel and lubricants. The County negotiated a new contract for fixed route service in December of 1986, providing for fixed route operations serving the east, northwest and western coastal areas of the County. In addition, the private sector provides City transit services in the Hilo and Kona areas of the County. The paratransit services are provided in the Hilo, Kona and South Puna areas.

The Hilo, Kona and Puna Dial-a-Ride service is provided from 7:00 AM to 5:00 PM, Monday through Friday, and is a consolidated service of human service clients and general public riders. The fixed route Hilo area

service is provided Monday through Friday consisting of an early morning route and a late afternoon route. Fixed route services in the Kona area consists of a morning and afternoon route Monday through Friday connecting the areas known as Kealia and Kailua. Farebox receipts are collected by the contractor and returned to the County Mass Transportation Agency and those fareboxes collected for the Dial-a-Ride system are retained by the Elderly Activities Division and the Economic Opportunities Council, and applied towards the reduction of service costs.

The rural fixed route services operate under the same private contract as the Hilo and Kona fixed route service. This rural service provides weekday services between Hilo and Honoka, Hilo and Pahoa, and Hilo and Kona. The Contract services also provide fixed route transit in the South Kohala area providing a single round-trip service Monday through Friday, serving the northwestern point of Hawaii County. Except for the population of the urban area of Hilo (42,000 population), and Kailua, the major tourist area on the west coast, the remaining portions of the County are very rural in nature.

FINANCIAL AND OPERATING DATA ANALYSIS

In the last three years, the Hawaii County transportation system has instituted major changes in order to reduce cost and improve productivity of its system. The Hawaii County transportation system provides a good example of rural transportation improving its productivity and providing the best service for the most people at the least cost. Table 5.1 compares the County's changes in the last two years and indicates the percent change in many productivity and cost categories. Figure 5.1 shows the differences between 1985 and 1986.

While the system has shown a 28.2 percent loss of ridership in the last two years (due to service reductions), the ridership per hour has shown a steady increase as a result of concerted efforts to improve its efficiency and productivity. The previous system had extended routes beyond the County's financial capacity and without a rapid increase in passengers per hour or per mile, was destined to fail. The data also points out that farebox recovery has improved over the two-year period by 32 percent. Such farebox receipts truly improve the financial stability of the system to respond to future and existing service demands.

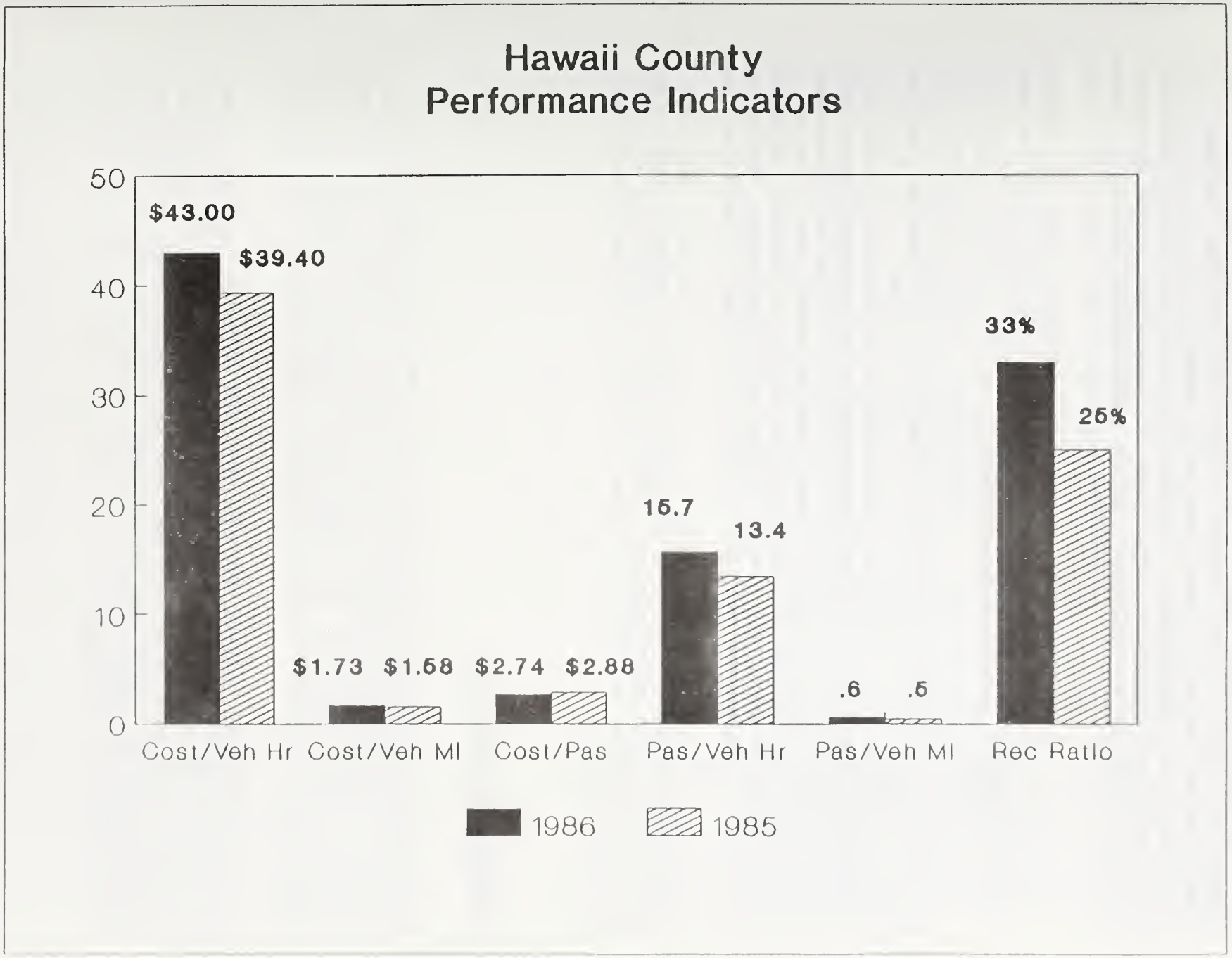
The cost per day and cost per passenger have shown a steady decrease over the two-year transitional period. On the revenue side, revenues per hour, day and mile have shown steady improvements in response to the changes instituted by the County Mass Transportation Agency. The health of the system is further evidenced by the reduction in subsidy to nearly 45 percent over the last three years and a reduction in subsidy per passenger by over 10 percent over the last three years.

Table 5.1
HAWAII COUNTY
TRANSPORTATION SYSTEM PERFORMANCE STATISTICS

Item	1984	1985	1986	% Change 1985-1986
Passengers/Year	362,223	309,203	221,971	-28.21%
Passengers/Hour	13.88	13.41	15.70	17.08%
Passengers/Mile	0.53	0.48	0.60	25.00%
Vehicle Miles/Year	680,637	563,666	352,540	-37.46%
Vehicle Hours/Year	26,101	22,606	14,180	-37.27%
Annual Operating Cost	$ 910,098	$ 771,370	$ 608,524	-21.11%
Annual Co. Admin. Cost	$ 104,051	$ 119,223	$ 104,414	-12.42%
Annual Total Cost	$1,014,149	$ 890,593	$ 712,938	-19.95%
Farebox Recovery	24%	25%	33%	32.00%
Cost/Hour	$ 38.85	$ 39.40	$ 43.00	9.14%
Cost/Day	$ 3,210.17	$2,579.41	$2,124.00	-17.66%
Cost/Mile	$ 1.49	$ 1.58	$ 1.73	9.49%
Cost/Passenger	$ 2.80	$ 2.88	$ 2.74	-4.86%
Annual Revenue	$ 334,616	$ 366,149	$ 223,213	-33.60%
Revenue/Hour	$ 12.82	$ 14.87	$ 16.00	7.60%
Revenue/Mile	$ 0.49	$ 0.20	$ 0.66	230.00%
Revenue/Passenger	$ 0.92	$ 1.09	$ 1.05	-3.67%
Subsidy	$ 679,532	$ 554,444	$ 375,766	-32.23%
Subsidy/Passenger	$ 1.88	$ 1.79	$ 1.69	-5.59%

Source: Hawaii County Mass Transportation Agency and calculations by Carter Goble Associates, Inc., June 1987.

FIGURE 5.1



Source: Hawaii County Mass Transportation Agency and calculations by Carter Goble Associates, Inc., June 1987.

The two-year trend brought about by the planned service cuts is expected to continue into 1987 and then stabilize. The transit system is beginning to identify new and expanded service that will be necessary to provide employment trips from the east side of the island to the west side. Such new service will probably begin in 1988, but will be initiated under the same cost and productivity requirements as are being used under the present operating scenario.

OVERALL IMPACT AND CURRENT STATUS

Interviews were held with the County Managing Director and the Mayor of the County to solicit their opinions as to the recent changes in the County's mass transportation system. The Managing Director of the County was fully supportive of the activities of the County's Mass Transportation Agency and took great pride in the successes of the system. He also expressed his belief that the County was going to come under more and more pressure to provide expanded public transportation services and he looks forward to this challenge knowing that it will follow the productivity standards established in the last few years by the Mass Transportation Agency.

The Mayor indicated his strong support for the recent changes to the public transportation program and felt comfortable with the service levels and service area. Both individuals were advocates for cost reduction and felt that their objective of reducing the cost for their transportation system had been achieved.

TRANSFER POTENTIALS

The adjustments made by the Hawaii County Mass Transportation Agency's Countywide transportation system are not uncommon to those that often must occur in transportation operations when funds are reduced. If funding reductions occur either at the federal or local levels, resulting in the need to reduce operations, the productivity results accomplished by the Hawaii County system are clearly successful coping methods that are also transferable.

Rural transportation systems may also find that primarily unserved areas may become better passenger origin or destination areas than those presently served. When demographic changes occur in service demand, a transportation system must be able to recognize those new demand areas and make the necessary changes. Many times these changes require the planned reduction or elimination of existing services in order to provide services to the largest number of individuals.

The Hawaii County system also shows that making the right changes at the right time is crucial. Hawaii County found itself with a transportation budget that it could not afford; an economy that was stagnant in producing very little growth in government revenues; a shift in the development of the island to the west coast with most of its population residing on the east coast; and a transportation system (due to its private sector operators) with a great deal of operating flexibility.

Recognizing these conditions and limits as ones that require tough decisions and major changes in the transportation system, the Mass Transportation Agency adopted a plan that reduced subsidy by over $300,000 (44.7%) and did so in a way which has had a minor impact upon those truly transportation-dependent citizens of the County. The County's analysis of its routes and the location of ridership density has resulted in a very effective and productive 1987 transportation system for the County.

This case study found that a reduction of one percent in vehicle miles per year, if properly planned and executed, can result in an equal percentage reduction in subsidy and nearly equal improvements in the ratio of farebox recovery. At the same time the system produced major improvements in passengers per hour (17.08%) and passengers per mile (25%). The bottom line is that the revised transit system reduced vehicle miles by 48.2% and increased farebox recovery by 33.29% in less than three years.

LAWRENCE BUS COMPANY

LAWRENCE, KANSAS

LAWRENCE BUS COMPANY
Lawrence, Kansas

INTRODUCTION AND HISTORY

The City of Lawrence is located in eastern Kansas about 35 miles east of Kansas City. Lawrence is a "university town" with approximately 40,000 permanent residents and 25,000 students.

The Lawrence Bus Company began business in 1957 as a private-for-profit carrier. The Company has never received funds from the City of Lawrence but managed to survive on business from the relatively large student population at the University of Kansas.

In 1976 the University of Kansas began contracting with the Company to provide services to students on a larger scale. The University was also interested in maintaining service for students and faculty. This action would alleviate the demand for parking on campus thereby benefiting the University. Since 1976, the Lawrence Bus system has become a predominantly student service; approximately 95 percent of the ridership is made up of students and faculty. The service area is approximately 25 square miles.

The contract between the University and the Lawrence Bus Company is administered by the Student Senate. The Senate employs a part-time student administrator/coordinator who oversees service to the University community. Approximately half of the bus drivers are students. The pay scale for drivers ranges from $4.25 to $6.25 an hour. The bus system, through its contracts with the University, has grown in the number of routes served. Initially, the routes were designed by the Student Senate Transportation Committee.

The Senate sells bus passes to students and faculty for $30.00 which entitles the holder to unlimited use of transit. Approximately 14,000 bus passes are sold a year generating $420,000 for transit service. The Senate subsidizes the remaining cost of providing service segregated from student activity fees. Part of all students' tuition ($26.00 per semester) $1.4 million goes to the Student Senate for student programs. Student transportation services include bus services, late-night taxi services and services for the disabled.

FINANCIAL AND OPERATING DATA ANALYSIS

Student funds subsidize three separate transportation services:

Lawrence Bus Company--The University of Kansas began contracting with the Lawrence Bus Company in 1976. At this time, the rate for service per bus hour was $9.50. By 1987, the vehicle hour cost was $22.50. The provider operates 23 buses -- seven 45-passenger and sixteen 35-passenger -- during the academic year. The vehicles range in age from 1967 to 1975.

Lawrence Bus operates on 12 routes during the school year providing 30,500 hours of service. Figure 6.1 reveals that in 1984 ridership was 1.6 million. By 1986, ridership had increased to 1.8 million, an increase of 12 percent. Ridership for 1987 is projected to be around 1.9 million passengers.

Steadily increasing ridership has been accompanied by increases in the cost per vehicle hour as shown in Figure 6.2. However, between 1984 and 1986, the cost per vehicle hour increased only by 7.5 percent compared to a 12 percent increase in ridership. The cost per vehicle hour has increased every year between 1980 and 1987 with the exception of the period 1983-84 when these cost were the same.

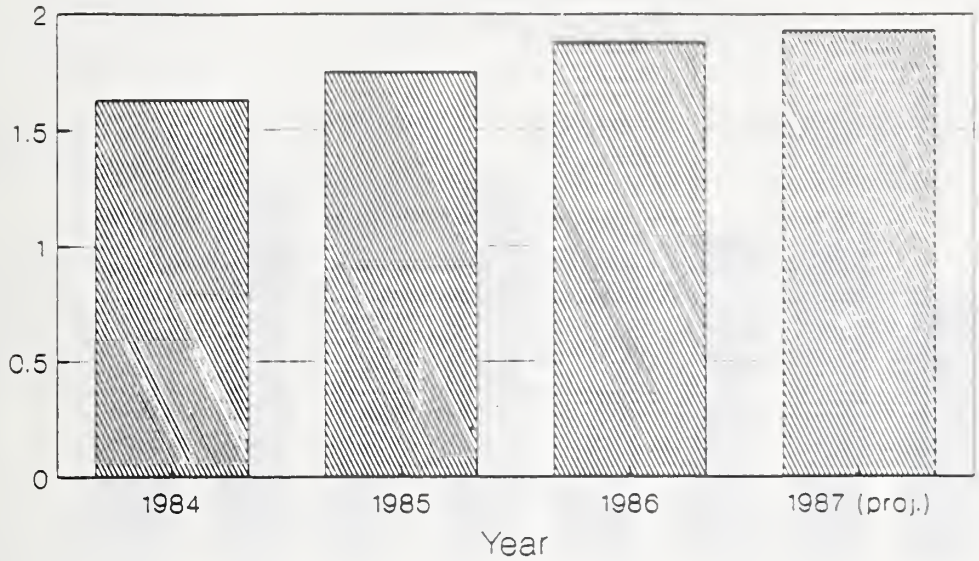
A substantial growth in ridership and a less than corresponding increase in cost per vehicle hour has had an impact on the cost per passenger and productivity. Figure 6.3 displays the cost per passenger from 1980 through the Spring semester of 1987. As can be seen from this Figure, the cost per passenger does not exhibit the same steady growth as ridership or cost per vehicle hour. University supported transit systems, like K.U. on Wheels, tend to have heavy ridership and vehicle load factors are typically high.

The service employs three full-time administrators, three mechanics and 29 drivers. Three-fourths of the employees are laid off during summer months due to the decrease in demand. The system carries 70 passengers per hour and 7.8 passengers per vehicle mile. The cost/vehicle hour is estimated to be $22.50; the cost/passenger is $0.38; and the subsidy/passenger is $0.14. The service is open to the public.

Secure Cab--The University also contracts with the local cab company to provide service for students from local taverns to their homes. The service is designed to encourage students to take Secure Cab rather than driving under the influence of alcohol. This service is only available to students and operates from midnight to 3:00 AM during weekdays and from 10:00 PM to 3:00 AM on Friday and Saturday. The Student Senate pays $2.50 for a single destination one-way trip and $1.25 for each additional destination. The cab driver records the following information for each student:

FIGURE 6.1

Lawrence Bus Co.
Annual Passengers

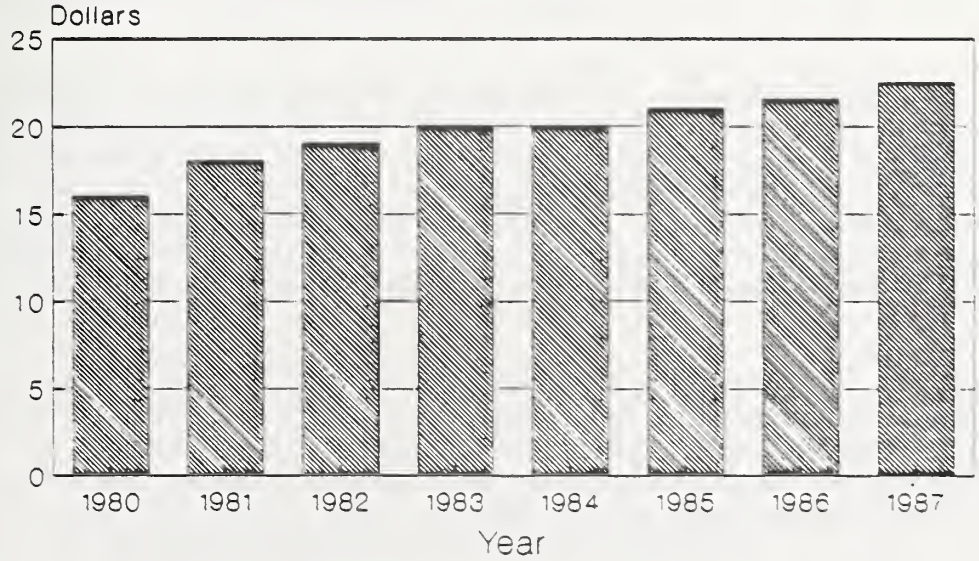


In Millions

Source: Lawrence Bus Company, June 1987.

FIGURE 6.2

Lawrence Bus Co.
Cost/Veh. Hr. 1980-87

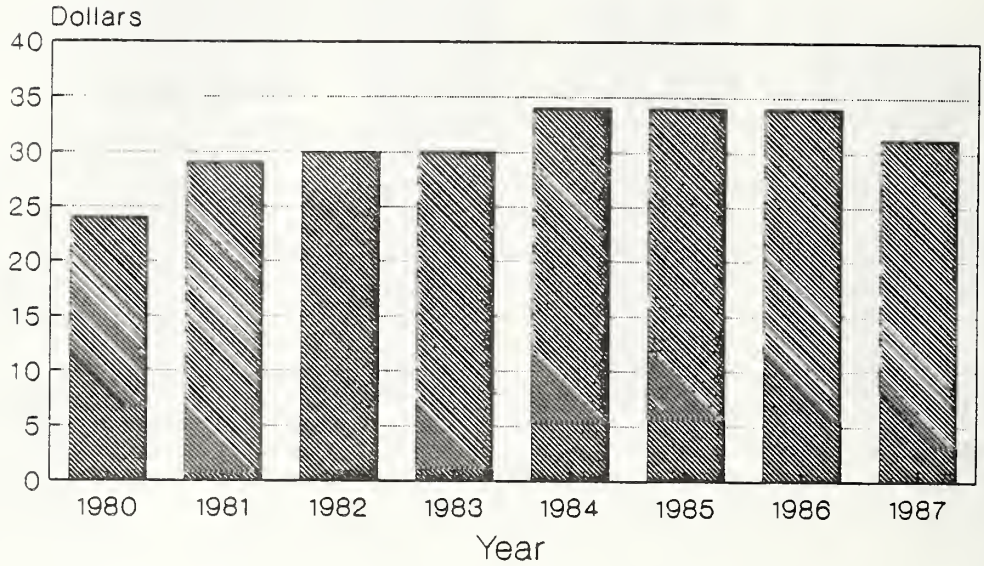


Fall Semester

Source: Lawrence Bus Company, June 1987.

FIGURE 6.3

Lawrence Bus Co.
Cost/Passenger 1980-87



Fall Semester

Source: Lawrence Bus Company, June 1987.

- Student I.D. number
- Name
- Time
- Pick-up location
- Destination
- Cab number
- Driver

The cab company bills the University monthly. This service costs between $20,000 and $24,000 per year.

Lift Van--The Facilities and Motor Pool Department of the University operate two vans. The service is provided about eight hours a day on a demand-responsive basis for disabled students. One of the vans is owned by the University and one is donated. The Department bills the Student Senate for all costs, operational and administrative.

The total budget for the three services is as follows:

Lawrence Bus Company	$ 682,000
Secure Cab	20,000
Lift Van	20,000
Total	$ 722,000

Of the $682,000 budget for transit, $420,000 is covered by bus pass revenue and the Student Senate provides a subsidy of $262,000 for the balance. Therefore, the Senate allocates $302,000 annually for transportation programs.

OVERALL IMPACT AND CURRENT STATUS

The University Student Senate transportation program provides a valuable mix of transit services to the students and faculty. Both the University and the Lawrence Bus Company would like to have greater involvement by the City, State and local business community. The Student Senate Transportation Committee loosely monitors the service by riding buses periodically. The Transit Coordinator appears to have a good working relationship with the operator and the student users. In addition, users seem to be satisfied with the service.

Another impact of the transit service is its contribution to the overall campus transportation system. Parking is a premium on virtually all university campuses and transit service tends to alleviate substantially the demand for parking. While data are not available to clearly support this for K.U. on Wheels, there is little doubt that the service does shift a significant number of students from cars to transit.

TRANSFER POTENTIALS

Advantages

- Contracting out of transit service keeps the University from becoming a direct bus operator.
- The service meets the needs of the students for mobility.
- The service reduces the demand for campus parking by shifting riders from automobiles to transit.
- The University has successfully maintained a relationship with the private provider for many years.

Disadvantages

- The service does not address the needs of the general public. While the system is open to the public, service is reduced to four routes during summer months.
- There is little monitoring or evaluation of the services provided.

KERN RURAL TRANSIT SYSTEM

BAKERSFIELD, CALIFORNIA

KERN RURAL TRANSIT SYSTEM
Bakersfield, California

INTRODUCTION AND HISTORY

Kern County has 11 public transit systems providing a range of services for County residents. The largest is the Golden Empire Transit District serving the Bakersfield metropolitan area. Kern County Transit, the subject of this study, operates no transit service directly but relies on a series of contractual arrangements to provide transportation to the residents in the non-metropolitan areas of the County. Service and vehicle types vary as do fares.

Kern County is located in southern California approximately 110 miles north of Los Angeles in the San Joaquin Valley. Bakersfield is the largest city with a 1980 population of 105,000, 1/5th of Kern County's population of 480,000. Sixty percent of the land area in the County is devoted to agriculture. Petroleum mining and agriculture are of major importance to the local economy. With an area of 8,172 square miles, Kern County is the third largest in the State. The population density for the County is 49 persons per square mile. The terrain is highly varied, ranging from rugged mountains to level valley land. The sheer size of the County presents challenging transportation problems.

Unlike most other states, California has legislation which authorizes the annual collection and use of a portion of the sales tax for transit and highway construction. In 1971 the State Legislature passed the Transportation Development Act to "improve existing public transportation services and encourage regional transportation coordination." The law provides for the use of one quarter of one percent of the County's retail sales tax revenues for transit and transportation. The funds are administered locally by regional transportation planning agencies. Counties, cities, special districts and consolidated transportation service agencies are eligible to receive funds directly. Funds collected from sales tax revenues are deposited into two funds; the Local Transportation Fund (LTF) and the State Transit Assistance Fund (STAF). Together these two funds support the major portion of Kern County's Transit Program. The County does not use UMTA funds for its transit programs.

Kern County has two types of transportation programs. The first, **Kern RTS**, provides service to the Kern River Valley, Lamont, and Mojave. These services are on a fixed-route and demand-responsive basis. Service

is provided through contract with Paul's Line, a private operator. The second way in which **Kern County Public Transit** provides transportation services for County residents is through a series of Joint Power Agreements (JPA's) with local units of government. Currently, the County has such agreements with Arvin, Delano, Ridgecrest, Shafter, Taft, Tehachapi and Wasco (elderly and disabled transportation only). Both of these types of services come under the Kern County Public Transit Program.

Kern County transit service began in 1979-80 as a result of the study of transit in the County and the urging of a local advocate group who encouraged the Kern COG to examine unmet transit needs in the rural parts of the County. The TDA legislation requires that funding recipients address "reasonable unmet public transportation needs" so the County began the process of starting transit service.

The use of private contractors to provide services has a long history in Kern County. County administrators believe that contractors can provide service at a lower cost and do as good a job as public employees. As a result of this attitude, a host of services are currently provided through contract with the private sector. The first solicitation for bids to operate the initial **Kern RTS** was advertised throughout the State but only two prospective contractors responded. Because of the limited competition, the cost per vehicle hour was high (around $50) but service was excellent. Subsequent solicitations occurred in a more competitive environment and cost was reduced to around $27 per vehicle hour.

The County has an established policy for evaluating contractors' qualifications. Before a bid is excepted, a Prime Contractor Information Check Sheet is completed as a way of assuring that the contractor will be able to perform the work in a satisfactory manner.

In addition to the **Kern RTS**, the County also entered into a series of Joint Powers Agreements with several communities. These JPA's enabled the County to provide service to residents of the unincorporated areas surrounding the respective community. They also permitted the County to maintain administrative control over service, fares and other operational characteristics of service.

With the use of TDA funds the County would pay for services to the unincorporated areas of the community; the community would provide the service directly or contract it out; and the community could also choose to operate its own service separate from any County funded program. In fact, some of the small towns in the County receive UMTA Section 18 funds for transit. Since 1980, the services have changed in response to consumer demand with adjustments being made as needed.

FINANCIAL AND OPERATING DATA ANALYSIS

The **Kern RTS** and the County service to rural unincorporated areas will be the subject of this case study. Information on other services provided in Kern County will, however, be used for comparison when warranted. The **Kern RTS** consists of three distinct systems serving the Kern River Valley RTS, Lamont RTS and Mojave RTS. All three services are provided through contract with Paul's Line Inc. of El Cajon, California and managed by the County. As in other transit services funded by the County (JPA's), the contractor provides the vehicles, vehicle maintenance, dispatchers and drivers. The current contract duration is two years, ending in June 1988.

Kern River Valley RTS--The Kern River Valley is located in the north central part of the county approximately 40 miles north east of Bakersfield. The area has a population of 15,320 (1986) and is characterized by mountainous terrain. Lake Isabella is the largest of the communities with a population of 4,312 (Figure 7.1).

Fixed route and route deviation service is provided to the area using two 1983 sixteen-passenger Bluebird buses with one additional 16-passenger bus serving as backup. Service hours are Monday through Saturday from 6:00 AM to 6:00 PM on weekdays and from 8:00 AM to 6:00 PM on Saturdays. Two round trips to Bakersfield are also provided daily.

The fare structure for the service is as follows:

Elderly, Disabled and Youth

Local	$ .40	One-way
Intercity	$1.75	One-way

All Others

Local	$ .75	One-way
Intercity	$2.75	One-way

Ridership on the Kern River Valley RTS is shown in Figure 7.2 from 1983 to 1986. As one can see, ridership has increased during this period but is expected to decrease slightly for 1987. Approximately 23 percent of the total ridership for 1986 was accounted for by the service to and from Bakersfield with the remaining 77 percent representing local service within the area. About half of the ridership is accounted for by seniors, the disabled and youth.

Lamont RTS--The Lamont Rural Transit System serves the Lamont-Weedpatch area which has a population of approximately 13,000. The service area is located 10 miles southeast of Bakersfield. Fixed route transit service is provided three times daily from Lamont to Bakersfield; demand-responsive

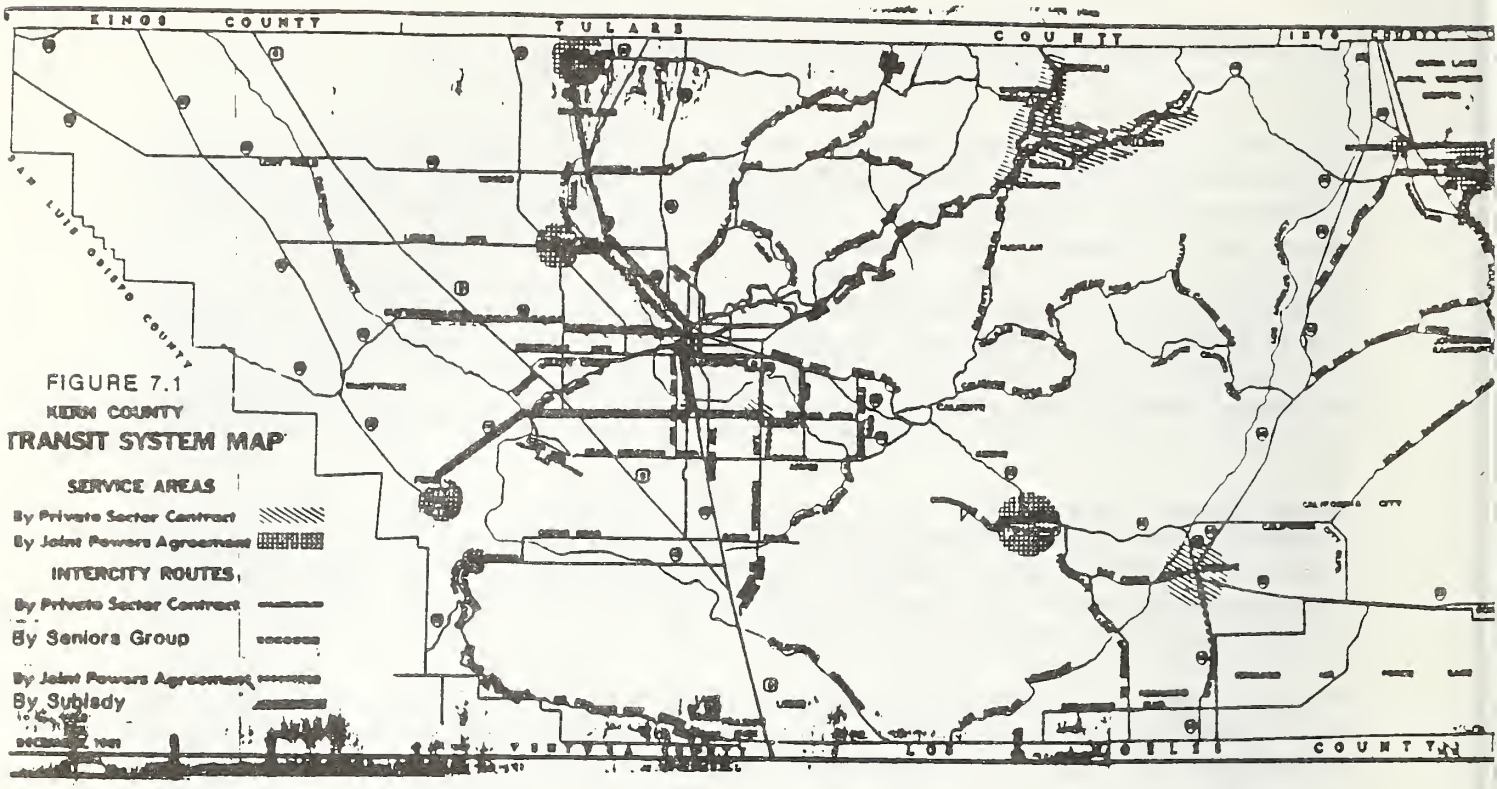
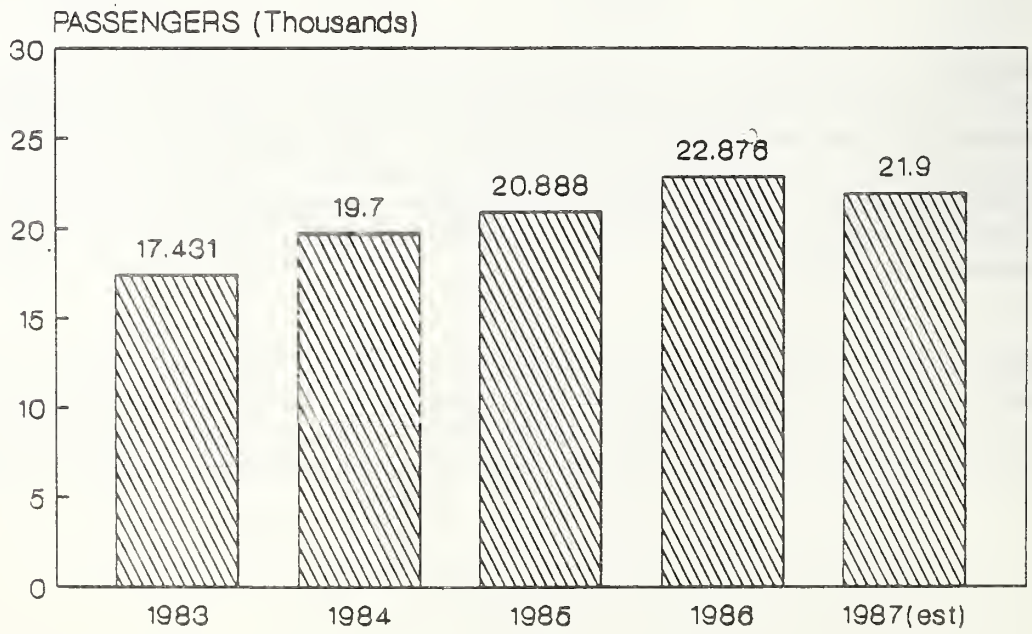


FIGURE 7.2
KERN RIVER VALLEY RIDERSHIP
1983-87



Source: Kern County Transit, July 1987.

service is provided in the local service area. One 16-passenger Bluebird (1983) bus is used to provide the service which operates Monday through Saturday from 8:00 AM until 5:00 PM.

Ridership on the system from 1986 was approximately 9,000 passengers. Sixty-three percent of this ridership was accounted for by the Bakersfield service; 67 percent of this was due to general public patronage. However, the service in the Lamont area had only 27 percent general public riders with the remainder accounted for by seniors, disabled and youth. Generally, ridership has increased gradually from 1983 to the present (Figure 7.3).

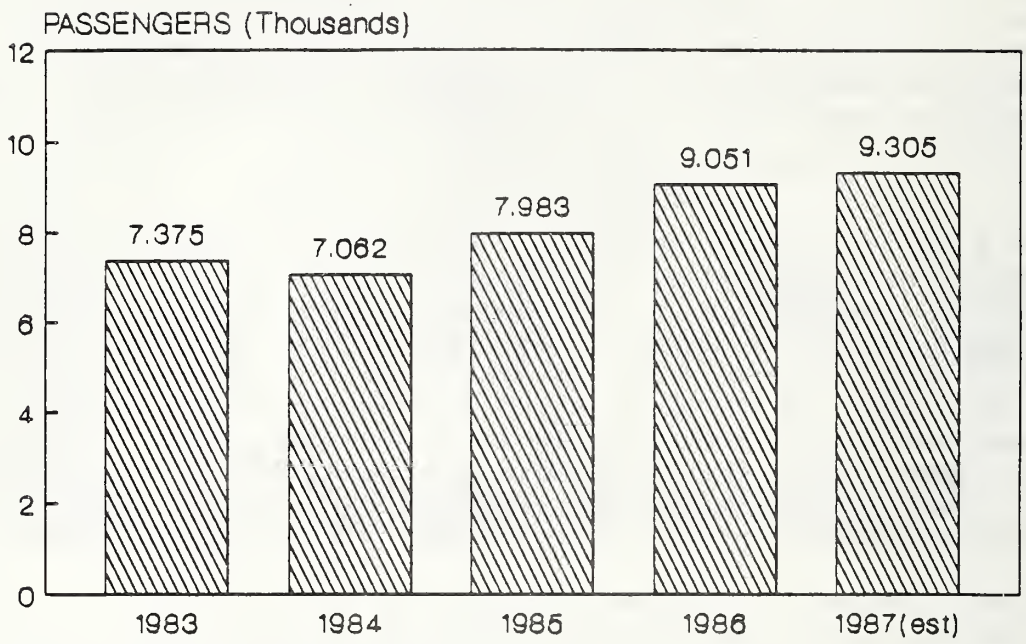
Mojave RTS--The Mojave area has a population of 3,700 (1986) and is located approximately 70 miles southeast of Bakerfield near Edwards Air Force Base. The service, in operation since 1980, consists of fixed-route and demand-responsive transit. One 16-passenger Bluebird bus operates Monday through Saturday from 8:30 AM to 5:30 PM. The morning service is fixed-route while the afternoon service is primarily demand-responsive with fixed arrival times at the Mt. View Plaza shopping center. Reservations for the demand-responsive service must be made by 8:15 AM on the day of the trip. Fares are $0.75 for the general public and $0.40 for seniors, disabled and youth.

As shown in Figure 7.4, ridership in 1986 was approximately 9,600. Senior, disabled and youth accounted for 87 percent of this patronage. Seventy-eight percent of the farebox revenue is from the demand-responsive service and the remaining 22 percent is from the fixed-route service. Since 1983 ridership has increased steadily but is expected to level off somewhat in 1987.

Comparing the Three RTS's - Operating statistics for the three rural transit systems are shown in Table 7.1 from 1983 to 1986 along with available estimates of these measures for 1987. For the Kern River Valley system, passengers/mile is low even for a rural system. However, this is due, in part, to the relatively long distances traveled on routes in the system. For example, the two daily round trips to Bakersfield travel over 80 route miles each. Mojave carries around 0.4 passengers/mile which is comparable to similar systems in low population density areas. Proportionally, ridership, passengers/mile and passengers/hour on the Mojave system has increased more than the two other services.

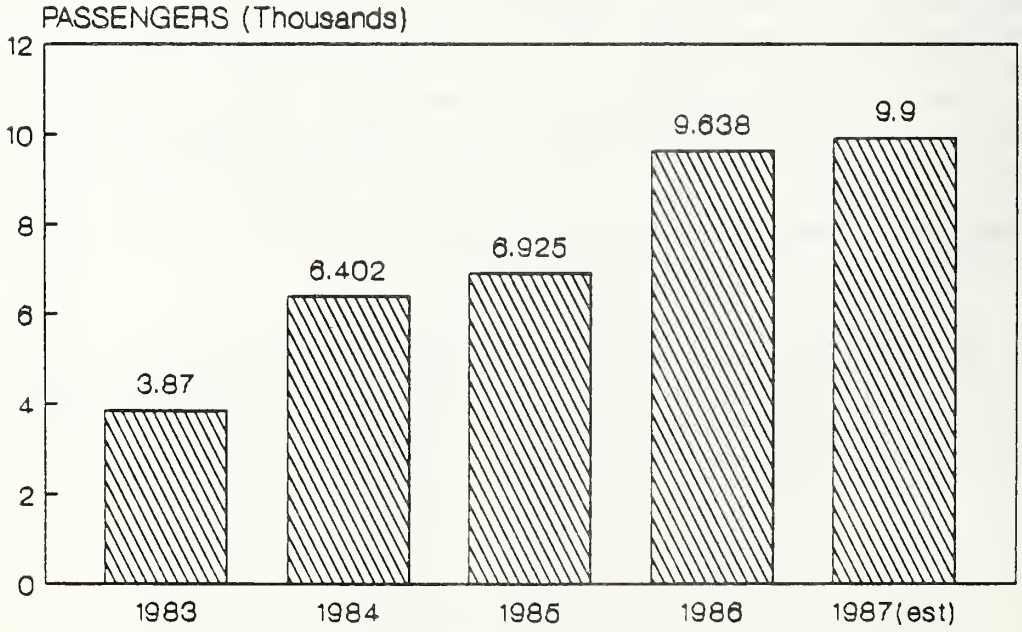
On the basis of the operating statistics displayed in Table 7.1, the Lamont service has been the most stable of the three systems. No doubt this is due to the restricted spatial extent of the service area--Lamont is only about 10 miles from Bakersfield and the demand responsive service in the Lamont service area is relatively small.

FIGURE 7.3
LAMONT RTS RIDERSHIP
1983-87



Source: Kern County Transit, July 1987.

FIGURE 7.4
MOJAVE RTS RIDERSHIP
1983-87



Source: Kern County Transit, July 1987.

Table 7.1
Kern RTS Operating Statistics

Fiscal Year Ending	**1983**	**1984**	**1985**	**1986**	**1987** (est)
Kern River Valley					
Passengers	17,431	19,700	20,888	22,876	21,900
Vehicle Hours	5,722	6,611	6,514	6,537	6,540
Vehicle Miles	178,223	203,247	197,536	207,500	--
Passenger/Hour	3.1	2.9	3.2	3.5	3.3
Passengers/Mile	0.1	0.1	0.1	0.1	--
Lamont					
Passengers	7,375	7,062	7,983	9,051	9,305
Vehicle Hours	2,064	2,476	2,448	2,456	2,460
Vehicle Miles	31,134	38,862	39,361	39,899	--
Passenger/Hour	3.6	2.9	3.3	3.7	3.8
Passengers/Mile	0.2	0.2	0.2	0.2	--
Mojave					
Passengers	3,870	6,402	6,925	9,638	9,900
Vehicle Hours	2,158	2,480	2,448	2,456	2,460
Vehicle Miles	13,390	16,839	16,527	19,237	--
Passenger/Hour	1.8	2.6	2.8	3.9	4.0
Passengers/Mile	0.3	0.4	0.4	0.5	--

Source: Kern County Transit, July 1987.

Comparison of Public and Private Systems - In order to assess the relative merits of private versus public operation of transit services in Kern County, data were collected for those systems which had a consistent base of information over the last five years. These services are as follows:

Public Operated Systems	Private Operated Systems
Shafter	Ridgecrest
Taft	Delano
Tehachapi	Kern River Valley
	Mojave

The public systems are operated by the communities they serve. The private systems are operated by contractors. The Kern River Valley, Lamont and Mojave services are operated by Paul's Line, Inc.; the Ridgecrest service is operated by Transwest Specialties through contract with the City of Ridgecrest; and the Delano service is operated by Gilbert's Flight Service through contract with the City of Delano. The operating characteristics used in this comparison apply only to that part of the service which is provided in the rural or unincorporated areas either through direct contract or Joint Powers Agreements between the County and the respective community.

Selected operating and cost characteristics are shown in Table 7.2 for the publicly and privately operated systems. Since these systems have not had the experience of going from public to private or private to public operation and due to the inherent differences from one system to another, average values are presented for the characteristics used for comparison. The cost/vehicle mile and cost/vehicle hour values for the two classes of operation are shown graphically in Figures 7.5 and 7.6.

Generally, privately operated systems have a lower cost/vehicle mile ($1.45) than do privately operated systems ($2.27). The same is true for cost/vehicle hour, although the difference is not as great; private systems average $22.18/vehicle hour whereas public systems average $23.44/vehicle hour.

It should be pointed out that the privately operated systems are weighted with the relatively high costs for the Ridgecrest service. Historically, this has been an expensive service for the County to provide. The reason for this is attributed to the way in which the County's share of the costs has been calculated and, persistent problems with operations. The County's cost to operate the Ridgecrest demand-responsive service is based on the prior year's ridership. For example, if the County's portion of the total ridership for a given year was 25 percent then the County's share of the expenses would be 25 percent. If ridership changed in a given year, the change would not be reflected until the next fiscal year. Ridership declined from FY 1984-85 to FY 1985-86 by 19 percent, but this reduction in cost to the County will not be reflected until FY 1986-87. In addition, the City of Ridgecrest has entered into a new operating agreement with the contractor for a much lower hourly rate.

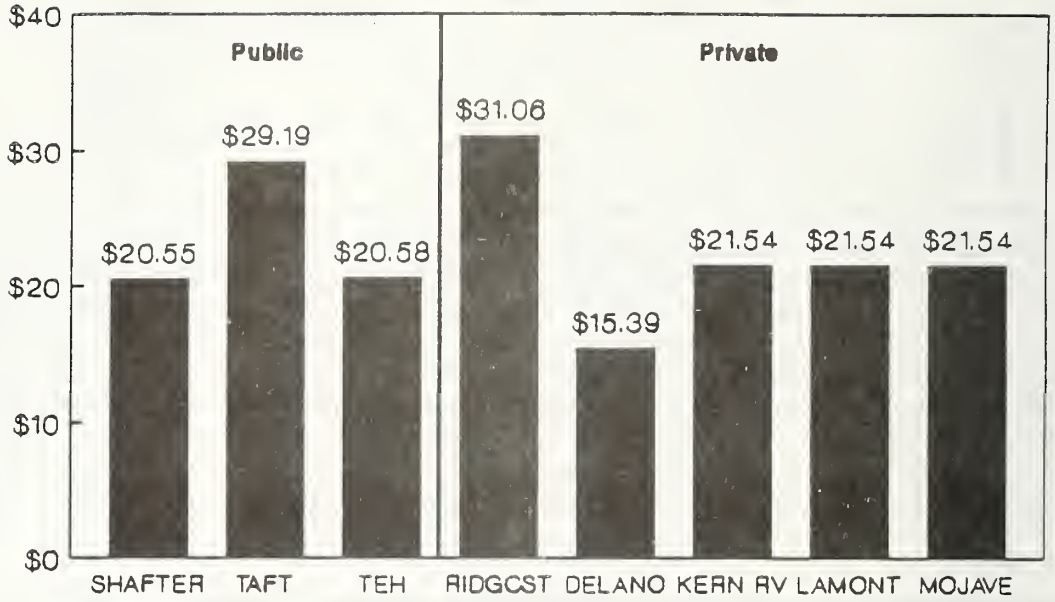
Table 7.2

Selected Operating Characteristics for Public and Private Systems
Kern County Transit - 1985-86

System	Cost/ Veh. Mile	Cost/ Veh. Hr.	Cost/ Pass.	Pass./ Veh. Mi.	Pass./ Veh. Hr.	Recovery Ratio (%)	Subsidy/ Pass.
Public Operated							
Shafter	$ 2.32	$ 20.55	$ 4.21	0.6	4.9	10	$ 3.79
Taft	$ 2.66	$ 29.19	$ 4.74	0.6	6.2	10	$ 4.25
Tehachapi	$ 1.82	$ 20.58	$ 5.58	0.3	3.7	12	$ 4.89
Average	$ 2.27	$ 23.44	$ 4.84	0.5	4.9	11	$ 4.31
Private Operated							
Ridgecrest	$ 1.86	$ 31.06	$13.78	0.1	2.3	6	$13.01
Delano	$ 0.65	$ 15.39	$ 2.94	0.2	5.2	32	$ 2.01
Kern RV	$ 0.68	$ 21.54	$ 6.05	0.1	3.6	15	$ 5.11
Lamont	$ 1.33	$ 21.45	$ 5.86	0.2	3.7	15	$ 4.95
Mojave	$ 2.75	$ 21.45	$ 5.49	0.5	3.9	8	$ 5.02
Average	$ 1.45	$ 22.18	$ 6.82	0.2	3.7	15	$ 6.02
Average Excluding Ridgecrest	$ 1.35	$ 19.96	$ 5.08	0.2	4.1	18	$ 4.27

Source: Kern County Transit, July 1987.

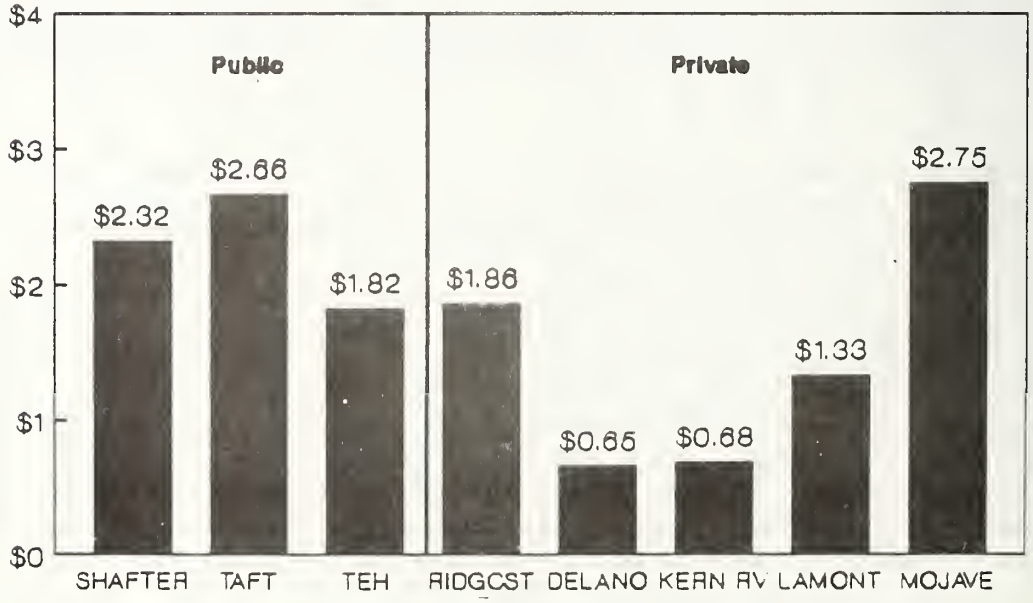
FIGURE 7.5
PUBLIC/PRIVATE COSTS
COST/VEHICLE HOUR



1985-86

Source: Kern County Transit, July 1987.

FIGURE 7.6
PUBLIC/PRIVATE COSTS
COST/VEHICLE MILE



1985-86

Source: Kern County Transit, July 1987.

Ridership declines in Ridgecrest have been traced to lack of publicity, dissatisfaction among users due to the inability of the service to handle all requests, abuse of the 24 hour reservation option and ineffective dispatching. These problems have recently been addressed by the City and County, but their effects will not show up until FY 1986-87 data are complete.

The Ridgecrest service is included here because it is a good example of what can happen to costs and productivity when a system, **public or private**, experiences problems with operations. Consequently, the average values for the operating characteristics displayed in Table 7.2 are also given for the privately operated systems excluding Ridgecrest.

With the effects of the Ridgecrest filtered out, the comparison of Table 7.2 is now more pronounced. The differences resulting from the comparison of public and private operations is easier to see on the bar graph in Figure 7.7. Privately operated systems cost $.92 less per vehicle mile, and $3.78 less per vehicle hour. Private systems also have a seven percent higher recovery ratio than public systems and a $0.04 lower subsidy per passenger. However, private operations have a $0.24 higher cost per passenger, a lower number of passengers/vehicle mile (0.2 versus 0.5) and carry 0.8 passengers/vehicle hour less than public operated systems.

Cost/passenger for private systems would improve more if their productivity measures for passengers/vehicle mile and hour could be increased. The lower productivity measures for privately operated systems is due, in large part, to the nature of the Kern River Valley system whose service area has only 23 persons per square mile as opposed to the Mojave service area population density of 222 persons per square mile. The Kern service area also, according to the 1980 Census, has one of the highest percentages of persons with public transportation disabilities (5.1%) in the County outside of the Bakersfield area.

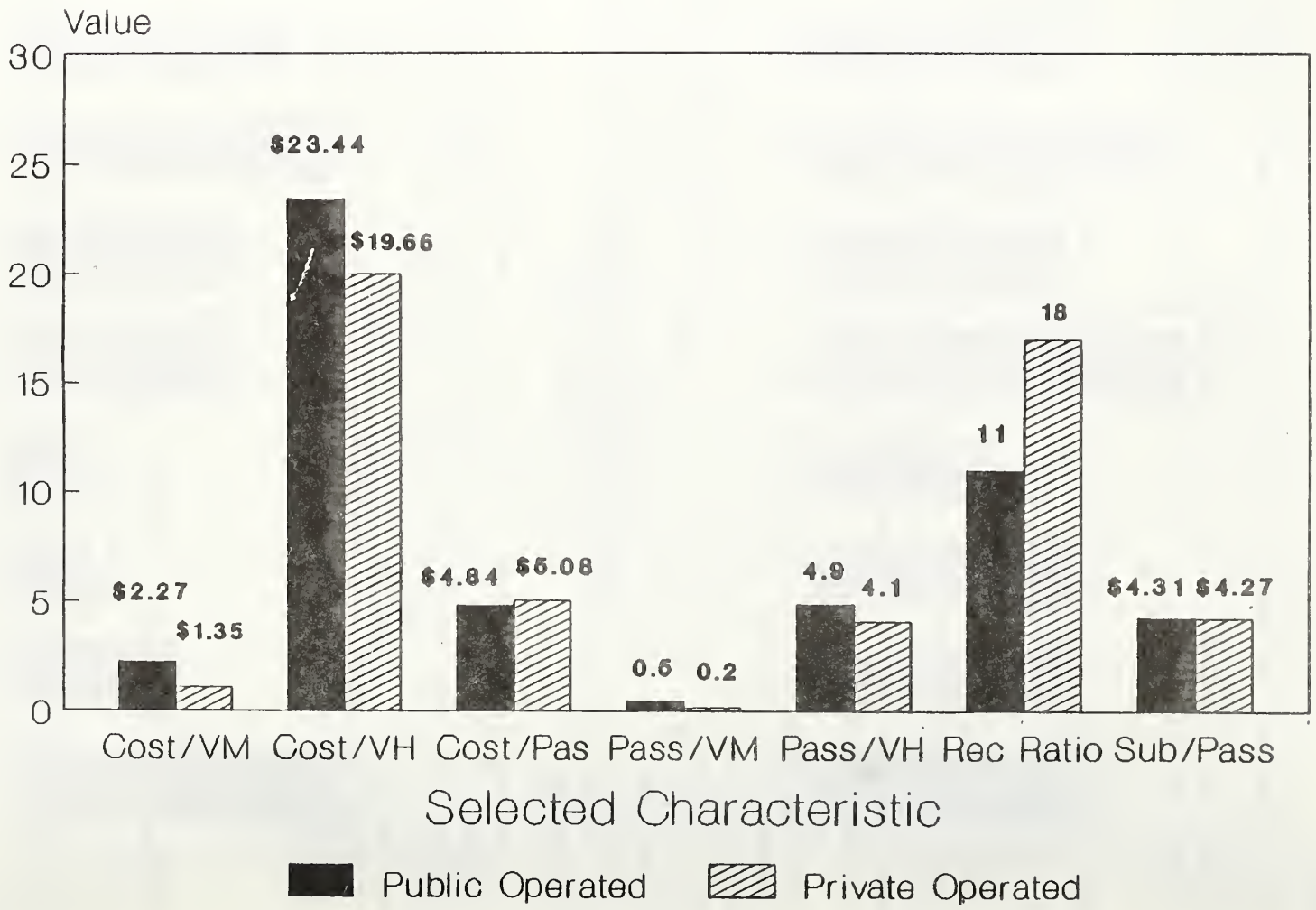
Considering service area differences and controlling for unique service problems, it is clear that in this case study privately operated transit services are less costly than those provided by the public sector. As stated previously, Kern County has a long history of using private contractors to provide services typically provided by public employees. The County's experience in negotiating with private contractors, and their sharing of this experience with local communities in the area, has resulted in lower cost of transit service.

OVERALL IMPACT AND CURRENT STATUS

The Kern County Board of Supervisors has approved Goals and Objectives used to guide administration of the Transit Program. Generally, these Goals and

FIGURE 7.7

Comparison of Public and Private Systems
1985-86



Source: Kern County Transit, July 1987.

Objectives are being met. However, because of the vagaries of contracting and JPA's, needed changes are sometimes not made (or even known) in a timely manner.

Public subsidies in the Kern County Program are totally funded by the TDA Local Transportation Fund and the State Transit Assistance Fund. No "local" or Federal funds are used (the TDA funds are generated locally, however). Some of the City services, like Taft, Delano and Shafter do use local assistance to fund transit. Restrictions on the use of TDA funds are few; a farebox recovery rate of 10 percent and triennial audits are two major requirements. This gives local officials a great deal of freedom to contract out services under almost any arrangement that can be worked out between two parties.

Relations between public officials and private contractors appear to be good. For example, the County presently has a one-year subsidy agreement with a contractor intended to assist the operator over some short-term financial problems resulting from a recent ownership change. In addition, the County periodically negotiates with contractors to lower costs and works with them to solve problems with operations that arise from time to time. County administrative staff make periodic site visits to monitor system operation and user satisfaction.

TRANSFER POTENTIALS

The major advantages and disadvantages of the Kern County Transit Program are as follows:

Advantages

- A consistent source of funding. Because of the Transportation Development Act, Kern County is in a rather unique position compared to systems outside of California. Few states have programs which fund transit services at the levels experienced by Kern County.

- Considerable experience in contracting out services (evident from process of selection used and written contracts).

- A long-held attitude among local County officials that support the use of the private sector in transit operations.

- A good working relationship with contractors and local communities in the County.

- No reliance on UMTA funds.

Disadvantages

- The use of Joint Powers Agreements can be a troublesome and indirect way to handle problems. If a problem arises in a particular service, County administrative staff contact local community staff who, in turn, deal with the contractor.

- Overall, the mix and number of services seems difficult to monitor since County administrative staff are somewhat removed from day-to-day operations.

In examining the Kern County Transit Program case study, the following lessons for success are noted: 1) The use of private sector providers is most successful when accompanied by a positive attitude toward service contracts by senior administrative officials; 2) The use of the private sector in transit operations can be considerably less costly especially in a competitive environment. On the other hand, lack of competition can increase costs substantially; 3) A willingness to increase private sector competition by soliciting bidders from beyond the local area; 4) Striking a balance between retaining important administrative functions in-house yet staying in communications with contractors and other operational staff (drivers and dispatchers) to monitor for operational problems; 5) A system for monitoring contractor and system performance and the associated willingness to work cooperatively with contractors and local community officials to solve problems as they arise; and 6) An independent system of accountability (like the triennial audits required by the State) to monitor costs and productivity.

SAMPSON COUNTY DEPARTMENT OF SOCIAL SERVICES

CLINTON, NORTH CAROLINA

SAMPSON COUNTY DEPARTMENT OF SOCIAL SERVICES
Clinton, North Carolina

INTRODUCTION AND HISTORY

The Sampson County Department of Social Services is a public agency established as a unit of County government. The department is operated pursuant to State law regarding the uniform provision of social services within the 100 counties of North Carolina. While a unit of County government, the agency is guided by an appointed social services board which approves an annual services plan for social service delivery. Programmatic and regulatory activities are administered by the State Division of Social Services, North Carolina Department of Human Resources. In addition to an array of social services financed through Title XX, the agency administers Title XIX, AFDC, Food Stamps and a number of lesser income support programs.

The agency has recognized the need to provide client transportation as a means of ensuring access to program services since the late 1960's. Typically, client transportation services provision has meant designating transportation as an optional service of the Adult and Family Service Unit in the annual service plan. Historically, the agency has provided the service in three different ways: a) reimbursement of social work staff using personal automobiles at a prevailing mileage rate; b) employment of human resource aides, hired specifically to provide client transportation, either in their personal cars or driving agency vans; and c) contracting for service with a local taxicab company. Use of social workers had been the only client transportation method until the mid-1970's when State regulations were modified to allow the use of human resource aides as transportation service providers. This change was a result of the growing demand and burden transportation was placing on the use of a social worker's time. The aides did not totally replace the use of social workers; however, a significant amount of the transportation demand was accommodated through the use of the aides. In 1983-84, the department entered into its first agreement with a local transportation company to supply and respond to a growing need to transport clients to out-of-county medical facilities.

Initiation of a contract with Sampson Transportation Enterprises, d/b/a Service Cab Company was one result of an almost four-year effort to coordinate all human service related transportation in the county. This local initiative followed major changes in State policy designed to better promote transit services coordination at the local level. State policy

changes included establishment of a State level interagency review committee to screen all local requests for transportation funding to ensure maximum services coordination and a requirement that all counties prepare a five-year Transportation Development Plan (TDP), outlining how human services transportation would be coordinated among local service providers. All Section 16(b)(2) applicants, for example, must be in conformance in a State approved and locally adopted TDP.

Sampson County's efforts to conform to these new State requirements resulted in the appointment of a local project advisory committee to oversee planning activities. From the onset the committee established two goals: a) to coordinate/consolidate all requests for capital equipment, including Section 16(b)(2) requests through a local clearing house organization; and b) to explore the feasibility of contracting all or part of transport services to the private sector. The first goal was established as a result of both State and local policy directives while the second goal was developed to specifically respond to repeated offers to bid on services made by a Service Cab Company in Clinton and State Section 16(b)(2) grant procedures that required private sector notification and sign-off.

As a result of the local planning effort, human service agencies in the County -- both public and non-profit -- incorporated the Transportation Advisory Board, Inc. (TAB) in 1979 to serve as the applicant agency for Section 16(b)(2) and to establish policy relative to services coordination. It was almost four years later, however, before any TAB agency achieved the second of the two original planning objectives when the Sampson County Department of Social Services signed an agreement with Sampson Transportation Enterprises in FY 1983-84. This contract has been renewed and expanded each year since the original agreement. In June 1987, the use of the private sector was expanded again and competitive bids, rather than negotiation, were utilized to seek other prospective private providers.

Environment

Sampson County is located in southeastern North Carolina and is North Carolina's largest county encompassing 947 square miles. With a 1980 population of 49,687 persons, the resulting population density is 52 persons per square mile. Clinton, the county seat, is the County's largest incorporated municipality with a 1980 population of 7,552 persons.

The area's economy is predominantly based on agriculture and agricultural processing. Almost 85 percent of the County's population is classified as rural by the Bureau of the Census. The closest urbanized area is Fayetteville, located some 35 miles to the west. The County experienced a loss in population during the period from 1950-1970; however, in the last 15 years the County has experienced mild population growth (10.5 percent).

There is no public transportation in the County and only limited intercity bus service (three trips per day). There are five taxicab companies operating a total of 11 cabs in 1987, all in Clinton. Eight public or non-profit agencies operate client transportation programs. These agencies own 27 vehicles, operated approximately 470,000 vehicle miles, and expended over $358,000 in FY 1986-87 providing 133,675 single, one-way passenger trips.

Service Description

As described above, the Department of Social Services was utilizing social workers and human resource aides to provide client transportation prior to FY 1983-84. These services generally consisted of transportation of Title XX eligible clients for medical appointments within the County. While the overall client caseload was not large (approximately 150 individuals) and trip purpose was restricted, the large geographic area of the County stretched Department resources to its limits. Moreover, as a result of the Blue vs. Craig decision, a class action suit involving State policy on medicaid transportation, the Department was becoming increasingly responsible for medical related transportation for trips for health services that could not be provided within Sampson County. The Department, for example began routine trips to neighboring urban centers such as Fayetteville, Wilmington, Chapel Hill and Durham to transport clients to dialysis, chemotherapy, and specialty medical clinics.

The Department assigned such trips to one human resource aide while the second of the two aides on staff serviced in-county trips. The Department in 1981 purchased two vans with Title XX funds for the aides to use in lieu of personal automobiles. The Department soon found that the out-of-county trips were consuming more than 40 hours per week. Both demand for service and overtime wages were growing beyond the agency's resources and capabilities.

The president and owner of Service Cab Company had consistently participated in local planning activities and worked with TAB, Inc. Due to the firm's persistence and on-going offers to provide service, the Director of the Department of Social Services began negotiations to subcontract the out-of-county services to Service Cab Company. Initially, the proposed contract called for Service Cab to provide only dialysis trips on a one day per week basis, thereby easing the overtime problem for the Department with the existing human resource aide responsible for out-of-county trips. Using their own vehicles, Service Cab agreed to provide these trips at $0.62 per vehicle mile.

All requests or authorizations for transportation are initiated and approved by the Department on a per trip basis. Trip authorizations are mailed several days in advance to the taxicab company where the dispatcher

confirms pick-up times with the clients. Service Cab Company must keep records in accordance with Department requirements. DSS staff developed the daily log form for use by the cab company. Additionally, Department staff provided training in keeping the log and preparing the monthly billing.

In FY 1984-85, the Department expanded the scope of services from one trip per week to three trips per week. Based on a schedule that is prepared for an entire year, two trips per week are scheduled for Fayetteville (primarily dialysis) and one trip per week to other regional medical centers on a rotating basis. This agreement has been renegotiated each successive year throughout the end of FY 1986-87. The company's rate during FY 1986-87 was $0.70 per vehicle mile.

The Department uses a standard vendor agreement (DSS-2252/Family Services) as the contract with the taxicab company. The agreement requirements specify the following:

- Rate per mile and maximum number of billable miles allowed during the fiscal year
- Method of reimbursement
- Driver qualifications (valid chauffeur's license - (NCDMV Class B)
- Minimum liability and comprehensive insurance coverage requirements
- Invoice schedule
- Trip booking/reservation procedures
- Allowance for the transport of other private individuals on sponsored trips

In FY 1986-87, the Department contracted for 44,095 miles of service at $30,867. Actual services delivered were somewhat higher at 47,527 miles and $33,289 for the year. Contract expenses represented 26 percent of the Department's fully allocated transportation expenditures while accounting for 32.9 percent of all agency sponsored passenger trips. This represents an approximate tenfold increase over the initial contract allowance in FY 1983-84. The Department's private sector contract expenditures represent 9.3 percent of all estimated human service transportation in the County.

The Department's total budget for transportation totaled $128,092 for FY 1986-87. Title XX finances 56 percent, Title XIX finances 27 percent while local government funds constitute the remaining 17 percent of transportation costs. No UMTA funds are used by the Department, although the TAB, Inc. has acquired six (6) vehicles under the Section 16(b)(2) program since 1983. The Department, however, does not utilize any of the UMTA financed vehicles in their operation.

The Department of Social Services' two vans each have in excess of 200,000 miles and are in need of replacement. Due to limitations in the availability of funding for capital acquisition, the agency had preliminary plans to participate in the TAB, Inc.'s Section 16(b)(2) application for vehicles in FY 1987-88. The agency has opted for this strategy only reluctantly as the Department feels the planning and grants requirements associated with Section 16(b)(2) are too burdensome. As an alternate strategy to vehicle replacement, the agency has solicited bids for private sector providers to provide in-county demand response services now performed by the two human resource aides in the two agency vans. Depending on the outcome of the bid process, the Department may be able to forego the need for $31,000 in capital investment ($24,800 in UMTA Section 16(b)(2) funds) as the bidders are responsible for supplying the vehicles. As of the writing of this report, the Department was evaluating the only bid received -- from the existing contractor.

FINANCIAL AND OPERATING DATA ANALYSIS

In analyzing financial and cost data, the important comparisons are between the three different types of transportation (see Table 8.1). Only in FY 1986-87 has the Department developed a cost allocation methodology that would allow for the true comparison of fully allocated costs. It should be noted that in making previous year awards to the private sector, cost was a major but not the sole determinant in making a contract award. (Figure 8.1).

Clearly, in terms of cost per passenger, the use of professional social workers to transport clients is the least cost effective for the Department. While the use of human resource aides and the agency's own vehicles is less costly than the per-mile or per-hour cost under the private sector contract, the contractors productivity is greater despite the fact that trip lengths are considerably longer than those of the in-county services.

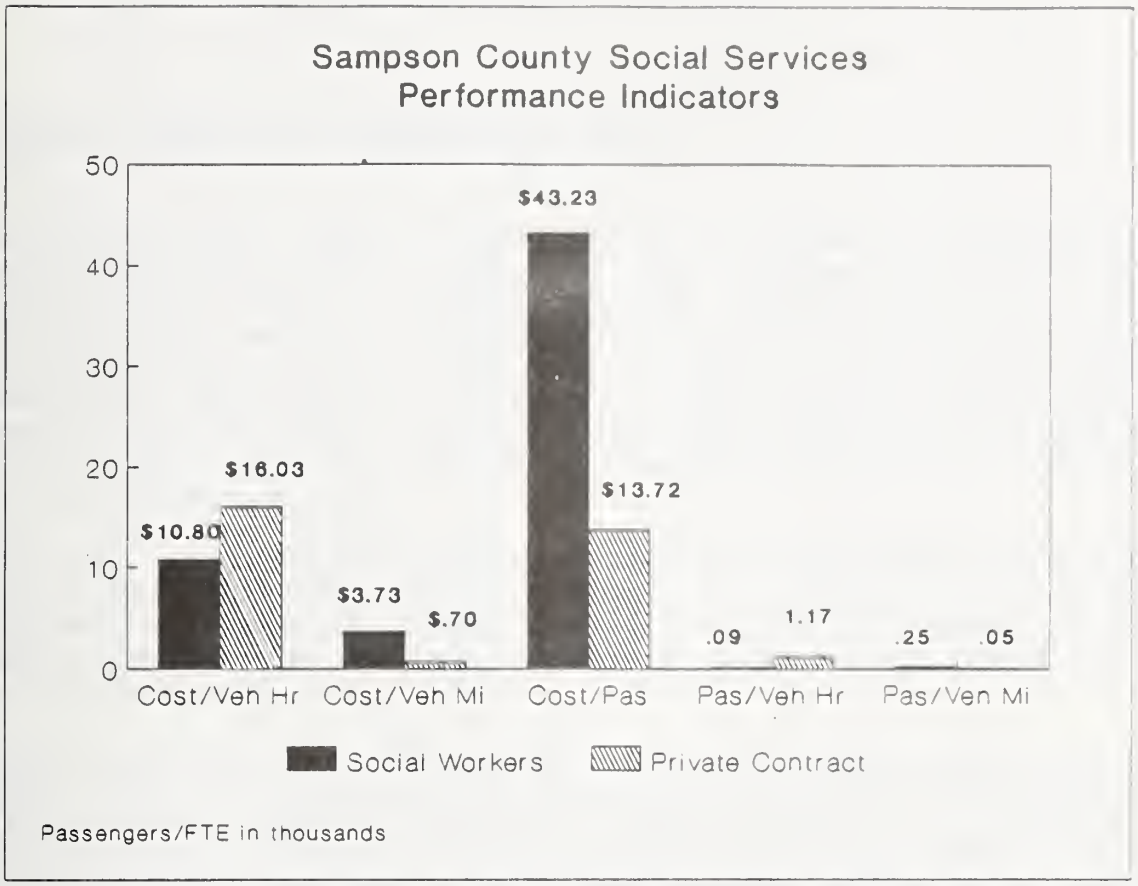
In examining the bid proposal submitted by Service Cab Company for FY 1987-88, the company has proposed a substantial increase in the rate for out-of-county trips. FY 1986-87 rates were negotiated at $0.70 per mile while the FY 1987-88 bid price was submitted at $0.85 per mile. However, as noted above, the Department also requested bids for the in-county services as well. The private company's bid for FY 1987-88 was $0.60 per mile

Table 8.1
Comparative Financial and Operating Data
FY 1986-87

Item	Social Workers	In-County Vans/w Aides	Private Contract
A. BASE DATA			
Passengers	1,219	3,717	2,424
Vehicles	--	2	3
FTE Employees	--	2.0	1.0
Vehicle Hours	4,878	3,840	2,076
Vehicle Miles	14,131	62,346	47,527
Total Cost	$52,703	$42,120	$33,269
B. PERFORMANCE INDICATORS			
Cost/Hour	$10.80	$10.97	$16.03
Cost/Mile	$ 3.73	$ 0.67	$ 0.70
Cost/Passenger	$43.23	$11.33	$13.72
Passengers/Hour	0.09	0.96	1.17
Passengers/Mile	0.25	0.05	0.05
Passengers/FTE Employee	N/A	1,859	2,424

Source: Sampson County Department of Social Services, July 1987.

FIGURE 8.1



Source: Sampson County Department of Social Services, July 1987.

for an estimated 71,880 miles of service. This represents a cost difference of $0.07 per mile of the Department's FY 1986-87 cost experience of $0.67 per mile over 62,346 annual miles of service.

OVERALL IMPACT AND CURRENT STATUS

The impact of four years of private sector contracting has been positive for the agency in a number of areas. First, the agency has been able to forego capital expansion to provide mandated medical services. By utilizing the private sector to handle its out-of-county trip needs, the agency was able to better schedule its existing two vans to meet in-county needs. Moreover, by limiting the use of the two human resource aides as drivers strictly within the county, the agency has avoided the overtime wages that were being paid when the aides were attempting to provide both in-county and out-of-county services.

A second, non-quantifiable benefit has been the more limited use of social workers as transportation service providers. The agency believes that such transport will never be totally eliminated due to the nature of their clients; however, use of social workers for routine client travel has all but been eliminated.

A third benefit has been what the agency believes is an increase in service quality. This is a significant finding in that many human service agencies have identified a loss of control and service quality as a hindrance to private sector contracting. The Sampson County Department of Social Services believes that due to the service oriented nature of the taxicab business, the company was prepared from the outset to offer a high level of care to the agency's clients. The agency cited no major complaints during the four years of contracting experience in the passenger relations area.

Another impact of consequence is the potential avoidance of capital cost in vehicle replacement. As noted earlier, the agency is currently considering bids to award the in-county service to the private sector. If this award is made (anticipated award date - August 1987), the agency will avoid $31,000 in capital outlay. In addition to the cost benefit, the agency cited the substantial administrative benefit of not having to participate in the Section 16(b)(2) grants process (through the TAB, Inc., the consolidated applicant for funds) which were viewed as cumbersome and time-consuming.

A final impact concerns the agency's use of staff and job classification. An FY 1986-87 evaluation of the entire agency cited the need for nine additional staff positions. If the in-county service is contracted for in FY 1987-88, the agency plans to re-classify the human resource aides to two of the nine positions cited in the evaluation, thereby making the agency's task of funding the expansion positions easier. The agency realizes that

the equivalent cost of two staff positions will have been reduced as a result of contracting its transportation.

With respect to achievement of initial goals and objectives, the probable FY 1987-88 contracting level by the Department will amount to approximately 57 percent of the agency's expenditures and about 20 percent of the combined expenditures of all human service agencies in transportation. This is significant given the zero level of expenditure prior to FY 1983-84. However, the agency expressed some disappointment that use of the private sector has not been attempted by any other TAB, Inc. service provider, despite the success and satisfaction achieved by the Department of Social Services.

TRANSFER POTENTIALS

There are several important elements that existed in Sampson County that facilitated development of private sector contracting. First, the State required private sector sign-off in the Section 16(b)(2) process forced agencies to acknowledge the potential and existence of private operators in the planning and grants process. Had this sign-off process not been in place, it is unlikely the contracting would have occurred when it did.

The existence of the sign-off process also caused the private taxicab owner to investigate and pursue contracting opportunities. While it took four to five years before a contract resulted, the persistence of this entrepreneur must be recognized as an important factor. Again, had this on-going involvement with the public planning and grants process not been present, contracting may not have occurred.

Another important element that should be recognized in this situation was the availability of technical assistance from both the State Department of Transportation and fellow taxicab operators in the State. The private operator was an active member of the State's taxicab association and was given assistance by other members who had contracts in their own communities. The State DOT assisted both the Department of Social Services and the operator in matters regarding rate setting, insurance levels, and contract language.

The transfer potential demonstrated by this case study appears to be fairly widespread. Virtually all localities have a designated agency that provides Title XX and Title XIX assisted services. Although each state administers these respective programs differently, a common characteristic is the dependence that many Title XX and Title XIX clients have an agency sponsored transportation to access program services. Moreover, the health

and social service agencies rarely have the financial or technical capabilities to offer the magnitude of transportation services necessary to satisfy client demand. Of course, many such agencies, particularly those in urban areas, do have a demonstrated record of contracting, particularly with private medicaid providers.

The Sampson County Department of Social Services is located in a very rural area and in a town of less than 10,000 in population. Only very small taxicab concerns existed and these firms had no experience in contracting or dealing with the attendant administrative details in accounting, recordkeeping, and record retention. At best, these firms could be described as the typical "mom and pop" operations found in many rural areas. Yet this one operator developed the capacity to handle such a contract on the order of $70,000 per year. The operator's willingness to accept technical assistance and the on-going quality control program by both the operator and the Department of Social Services has avoided major problems and no substantial audit problems have been identified during the duration of the contract. The operator and the Department are satisfied with the arrangement and there is a high level of mutual satisfaction with the service provided.

OVERALL FINDINGS AND CONCLUSIONS

OVERVIEW

In this section, four major topics are addressed as a way to summarize the findings of this study and to present major conclusions which, hopefully, will be useful for those individuals and agencies contemplating greater private sector involvement in their transit services. The four topics deal with: 1) success in using private transportation companies; 2) reducing government intervention; 3) coping without UMTA funding; and 4) elements for success.

Of the eight case study systems, five, Canon City, Chester County, Hawaii County, Kern County and Lawrence involved some participation from the private sector since their inception. Cape May, the CTA Specialized Service, and the Sampson County Department of Social Services are systems that have shifted part or all of their transit services to the private sector only recently. All of the eight case study representatives contacted spoke positively of private sector involvement.

All of the systems studied make use of service contracts which involve private contractors in the day-to-day operation of transit services while system management retains control of policy issues. These service contracts vary from simple to complex agreements between the contractors and the local agencies or organizations sponsoring transit services.

Summary statistics for the eight case studies are shown in Table 9-1 and comparatively aggregate statistics for selected indicators between public and private operators. Cursory examination of this table reveals the wide range of values for virtually all of the statistics presented. For example, service area population density varies from a low of 18.6 for Cannon City to 13,095 persons per square mile in the Chicago area. Likewise, cost per passenger ranges from a low of $.38 for Lawrence, Kansas to a high of $17.40 for Sampson County, North Carolina. What the information in this table demonstrates is the great variation among the case study system. It is not intended as a base of comparison between systems, but rather as a base of understanding which one or ones may relate to the reader's area. The purpose of this study is to document the use of private providers in transit service provision and to record the associated elements of success as found in a wide variety of environments.

Table 9.1
CHESTER COUNTY PRIVITIZATION CASE STUDIES SUMMARY STATISTICS

Site and Type Service	Service Area Pop. (000's)	Area	Pop. Density	Annual Vehicle Miles (000's)	Annual Vehicle Hours (000's)	Annual Pass. (000's)	Total Cost (000's	Oper. Cost (000's	Pass./ Vehicle Mile	Pass./ Vehicle Hour	Cost/ Vehicle Mile	Cost/ Vehicle Hour	Cost/ Pass.	Subsidy/ Pass.	UMTA $ % of Cost	Farebox Recovery (Percent)	Number Vehicles at Peak
Canon City Taxi	32	1,538	19	42	5.8	19.4	$ 42	$ 21	0.46	3.3	$0.50	$ 3.62	$ 1.00	$ 1.00	25	50	4
Kern County FR & DR	480	8,172	49	415	21.5	90	$ 800	$ 668	0.2	4.2	$1.37	$26.53	$ 6.33	$ 5.61	0	11	2-10
CTA (Chicago) DR	3,300	252	13,095	4,034	N/A	618	$7,200	$6,600	0.14	N/A	$1.81	N/A	$12.48	$11.58	N/A(1)	7	130
Lawrence, Kansas FR & DR	25	25	1,000	299	30	1,800	$ 680	$ 600	7.8	70	$2.25	$22.50	$ 0.38	$ 0.14	0	62	23
Cape May County FR	82	200	410	33	1.3	28	$ 28	$ 28	.84	22	$ .85	$22.00	$ 1.01	$ .16	16	84	2
Chester County DR	317	762	416	1,473	73	240	$1,380	$1,347	.16	3.3	$ .94	$18.90	$ 5.75	$ 5.66	0	2	37
Hawaii County FR & DR	120	4,000	30	352	14.2	223	$ 713	$ 608	.6	16	$1.73	$43.00	$ 2.74	$ 1.69	17	33	19
Sampson County DR	50	947	52	48	2.1	2.4	$ 33	$ 33	.05	1.17	$ .70	$16.03	$13.72	$13.72	0	0	3

Source: Data collected from each system by Carter Goble Associates, Inc. and LRS, Inc., May - July 1987.

1) No direct grant subsidy of UMTA funds are made, however, since funding for CTA administrative staff who oversee the subcontractors includes UMTA funds, some marginal amount of UMTA funds are involved.

Success In Using Private Transportation Companies

How does one measure success? In the current context success is present when a system uses the private sector to provide transit services in an efficient and effective manner within the context of local conditions; when the management of a system and private contractor have good working relationships; when important consideration such as cost or efficiency lead a system's management to turn to the private sector; and when the service provided meets local desires for management and users.

Virtually all of the systems included in this study have been successful in using (or initiating use of) the private sector for transit services. As stated above, five of the systems, Canon City, Chester County, Hawaii County, Kern County and Lawrence, have made use of private-for-profit contractors from the beginning. The remaining systems have only recently turned to the private sector for services. In those cases where initial competition clearly existed prior to entering into contract agreements -- Kern County and Chicago's CTA -- cost savings and increased effectiveness were realized. The CTA's Hybrid User-Side Subsidy Program is exemplary of costs being reduced through private sector contracting. CTA-operated suburban service had a per passenger cost of approximately $28.00 while the service provided by private contractors reduced this cost to around $12.50 per passenger. Substantial increases in efficiency and effectiveness were also realized.

A summary of the highlights of success in using private transportation companies is as follows:

Canon City, Colorado

- High level of cooperation between sponsor of transit service (AARP) and private taxi operator.
- Initially, the private provider was the only logical community resource to use.
- Personal commitment to provide transit services to the community where non-existent before.

Cape May County, New Jersey

- Initial planning study was important because it involved the private operator at an early stage and helped increase awareness of local officials of the possibilities for private sector involvement.

- Local government officials had a positive attitude toward involvement of the private sector. Many new expanded opportunities for the users resulted.

- Use of private operator resulted in cost savings and increases in efficiency and productivity.

- The County is the major source of funding for its system which made both elected officials and government staff interested in opportunities for cost efficiency improvements.

Chester County, Pennsylvania

- Private sector involvement was encouraged from the outset by the State DOT and strongly supported by local officials.

- Attitudes of local elected officials called for minimizing public sector involvement in favor of private participation. County officials did not want to create an additional government agency.

- Initial system start involved selection of contractors through competitive bid process.

- Present Countywide service provided by one contractor. Over a two-year period costs per vehicle hour have declined from $19.06 to $18.90 debunking the idea that once private operators are contracted with they will continue to increase costs and inefficiency of their service.

- Existence of a competent, professional contractor was an important factor in countywide system start-up.

- Good relationships exist between County officials, the private contractor and social service agencies.

CTA Chicago, Illinois

- A strong desire among CTA officials to reduce costs and increase efficiency.

- CTA staff conducted a systematic review of existing approaches to specialized transit and made use of the findings in system design.

- Substantial and meaningful input from local advisory committee in service design.

- Availability of multiple, competent bidders to respond to CTA's competitive bid process.

- Use of private sector providers reduced costs and expanded capacity to meet demand for service.

Hawaii County, Hawaii

- County officials consider use of the private sector as a method of stimulating the local economy and acknowledge the flexible nature of privately-operated companies.

- A cost reduction and productivity improvement plan resulted in an operating cost reduction of $300,000 over a two-year period and an increase in productivity of 17 percent.

- A mix of private-for-profit and private-non-profit providers appears to work well in the local environment.

Lawrence Bus Company, Lawrence, Kansas

- Minimal government involvement, local or national, enables the system to be responsive to student users.

- The relationship between the University and the private operator is symbiotic; the University does not want to become an operator of transit service and the bus company relies on the University community for a major portion of its business.

- The private operator has been providing service in the community for 30 years and has an obvious vested interest in providing a successful service.

Kern County, California

- The County has a long history of using private contractors for a variety of service resulting in an attitude that private contractors can usually provide a service at lower cost and more effectively than public employees.

- Good working relationships with contractors and local units of government within the County.

- County officials believe that a competitive environment is essential for private sector participation.

- The County uses a formal evaluation and selection process for private contractors in an attempt to avoid problems before contracts are granted.

- A stable source of local/state funding allows multi-year contracts with the private sector.

- An independent system of monitoring and evaluation (triennial audits) tracks costs and productivity.

Sampson County, North Carolina

- use of private providers for out-of-County trips has reduced the need to use social workers for such trips and reduced the level of overtime payments.

- The use of private providers has eliminated the need to make capital purchases.

- Technical assistance from the State DOT and State taxicab association provided important information to the County and the operator regarding rate setting, insurance and contract language.

Minimizing Government Intervention

One lesson learned from this study is that there are more than a few local officials, both elected and appointed, that believe in minimizing government involvement in transit services. For a variety of reasons, local representatives feel that the private sector can do a better job of providing service and do it at a lower cost than public agencies. Other fundamental beliefs held by local representatives include:

- The private sector is more flexible and has more options in responding to problems such as fluctuations in demand.

- Private contractors are inherently more cost efficient and more productive than government staffed services.

- Use of private contractors eliminates the need to make large capital outlays for equipment and maintenance facilities.

- Use of private contractors in a competitive environment keeps costs down and provides a built-in control on quality of service in the long run.

- Local government should be the operator of last resort, becoming involved in operations only when it is not possible or desirable to have private sector involvement.

- Expansion of public sector employment and the attendant increase in bureaucratic procedures can be avoided through private sector involvement in transit.

Minimizing local government involvement does not necessarily mean financial involvement. Two of the case studies, Cape may County and Hawaii County, contribute substantial local public funds, 48 and 46 percent respectively, to their transit programs. The Canon City system receives 25 percent of its budget from a city-county combination grant. While Kern County predominently uses State-collected sales tax revenues, these funds are generated originally at the local level. Only Chester County, K.U. On Wheels and Sampson County use few or no local dollars for transit.

In most of the cases represented in this study, primary financial support for transit came from State funds or a combination of local and State funds. Only in the case of K.U. On Wheels is a major share of the funding supported by user-generated revenues. Among the systems studied, there is a tendency to avoid the use of UMTA funds because of a perception that doing so would involve a high degree of added paper work, delays and additional administrative requirements and regulations.

For several of the case studies included in this study, minimizing local government involvement appears to apply mostly to staffing and actual transit operations. Those systems with little local public financial involvement do retain control on policy issues and set expectations on fares, service quality and frequency, vehicle maintenance and establish procedures for complaints and fare collection methods. Government staff involvement is generally minimized.

Coping Without UMTA

Providing transit services without substantial UMTA financing appears to be feasible for most of the eight systems in this study. Reference to Table 9.1 shows that four of the eight systems used no UMTA funds at all, three used anywhere from a minimum of 16 percent to a maximum of 25 percent of UMTA funds and one used a marginal amount as a percent of their operating cost. In some cases, like Chester County and Kern County, the use of state funds has contributed a major share to total costs obviating the need for UMTA funds. However, both of these counties are located in states that have well organized, general state funding programs. On the other hand, Cape May County and Hawaii County simply have a strong local commitment to providing transit service since both provide local dollars to cover approximately half of their respective costs.

With perhaps one exception, all of these systems would, no doubt, continue to operate without any UMTA support. There would be hardships and possibly some service cuts, but service would continue. Even the small Canon City system, with the highest financial contribution from UMTA, would continue. It would be difficult for the Canon City system managers to raise replacement revenues, but, given their commitment, they would find some way to do just that.

Seven of the eight systems did not initially rely on financing from UMTA to build their transit services. For some there was no need since other sources of funding were available; for others there was absolutely no desire to get involved with whatever they perceived to be the "cost" of using UMTA funds; for still others their choices simply lead them to other sources of funding. In the final analysis, the accomplishments of many of these systems demonstrate that local services involving private sector subcontractors can be successful without UMTA funds.

Elements of Success

If one examines the case studies presented here from a "fact finding" or "professional" approach, one can find specific elements of success that are present -- some are transferrable, others are not. However, if one looks beneath the surface it is apparent that in most of the case studies, what was present was a level of personal commitment to an ideal or a goal and the willingness to act. Sometimes this involved only one individual like the persistent cab driver in Sampson County, N.C. In other cases, more people were involved in achieving a common purpose like Messrs. Romanick and Golden and their AARP fund raisers in Canon City; or the County Commissioners and staff in Chester County; or the dedicated staff in Chicago or Cape May. So, to the extent that there is any secret about involving the private sector in transit, it appears that dedicated people in the public and/or private sector make a difference.

In addition to rediscovering the often overlooked dedication of individuals, the most useful contribution of this study is to identify the generic elements of success in private sector involvement. These are generic in the sense that they are derived from the sum of experience gained in conducting this study and collectively tend toward the ideal case. The elements of success listed hereunder represent an attempt to capture the truly critical conditions which foster successful private sector involvement.

- Availability of competent, professional contractors, preferably one or more, who are open to the possibility of working with a public agency.

- A source (or sources) of funding which allows initial growth.

- A positive attitude among local elected officials that supports private sector involvement.

- The commitment of both local officials and staff to provide efficient, cost effective transit service.

- A process to screen bidders to determine if they are able to provide needed service and provide it in a professional manner.

- A monitoring program that reduces the paper burden of contractors, yet allows administrators to monitor operations.

- A source of technical assistance to aid in developing procedures for operational protocols, contract language, insurance, maintenance requirements, etc. This function can be performed by a State DOT, other service providers, professional associations, experienced agencies or consultants.

- Establishment of positive and effective working relationships between administrative staff and contractors.

- Someone to administer the program who has an ample share of common sense, is good at working with people and has an open mind for new possibilities in private sector involvement.

- Persistence

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